SERFF Tracking Number:
 NYLA-125649801
 State:
 Arkansas

 Filing Company:
 New York Life Insurance and Annuity
 State Tracking Number:
 39032

Corporation

Company Tracking Number: 207-198

TOI: A021 Individual Annuities- Deferred Non- Sub-TOI: A021.003 Single Premium

Variable

Product Name: GMIR Change 2008

Project Name/Number: GMIR Change 2008/207-198

# Filing at a Glance

Company: New York Life Insurance and Annuity Corporation

Product Name: GMIR Change 2008 SERFF Tr Num: NYLA-125649801 State: ArkansasLH TOI: A02I Individual Annuities- Deferred Non-SERFF Status: Closed State Tr Num: 39032

Variable

Sub-TOI: A02I.003 Single Premium Co Tr Num: 207-198 State Status: Filed-Closed Filing Type: Form Co Status: Reviewer(s): Linda Bird

Author: Naomi Quick Disposition Date: 05/20/2008

Date Submitted: 05/16/2008 Disposition Status: Accepted For

Informational Purposes
Implementation Date:

Implementation Date Requested: On Approval

State Filing Description:

## **General Information**

Project Name: GMIR Change 2008 Status of Filing in Domicile: Pending
Project Number: 207-198 Date Approved in Domicile: 05/16/2008

Requested Filing Mode:

Explanation for Combination/Other:

Submission Type: New Submission

Overall Rate Impact:

Domicile Status Comments:

Market Type: Individual

Group Market Size:

Group Market Type:

Filing Status Changed: 05/20/2008

State Status Changed: 05/20/2008 Deemer Date:

Corresponding Filing Tracking Number:

Filing Description:

This informational filing is for GMIR change for new issues of previously approved froms referenced in the filing.

# **Company and Contact**

SERFF Tracking Number: NYLA-125649801 State: Arkansas 39032 New York Life Insurance and Annuity

Filing Company:

State Tracking Number:

Corporation

Company Tracking Number: 207-198

TOI: A02I Individual Annuities- Deferred Non-Sub-TOI: A02I.003 Single Premium

Variable

GMIR Change 2008 Product Name:

GMIR Change 2008/207-198 Project Name/Number:

**Filing Contact Information** 

Naomi Quick, Contract Consultant naomi\_quick@newyorklife.com

1 Rockwood Road (914) 846-5789 [Phone]

Sleepy Hollow, NY 10591

**Filing Company Information** 

New York Life Insurance and Annuity CoCode: 91596 State of Domicile: Delaware

Corporation

1 Rockwood Road Company Type: Group Code: 826

3N851

Sleepy Hollow, NY 10591 Group Name: State ID Number:

(914) 846-3508 ext. [Phone] FEIN Number: 13-3044743

**Filing Fees** 

Fee Required? No Retaliatory? No

Fee Explanation:

Per Company: No

**COMPANY AMOUNT** DATE PROCESSED TRANSACTION #

New York Life Insurance and Annuity \$0.00 05/16/2008

Corporation

 SERFF Tracking Number:
 NYLA-125649801
 State:
 Arkansas

 Filing Company:
 New York Life Insurance and Annuity
 State Tracking Number:
 39032

Corporation

Company Tracking Number: 207-198

TOI: A02I Individual Annuities- Deferred Non- Sub-TOI: A02I.003 Single Premium

Variable

Product Name: GMIR Change 2008

Project Name/Number: GMIR Change 2008/207-198

# **Correspondence Summary**

## **Dispositions**

Status	Created By	Created On	Date Submitted
Accepted Fo	r Linda Bird	05/20/2008	05/20/2008
Informational			
Purposes			

SERFF Tracking Number: NYLA-125649801 State: Arkansas State Tracking Number: 39032

Filing Company: New York Life Insurance and Annuity

Corporation

Company Tracking Number: 207-198

TOI: A02I.003 Single Premium A02I Individual Annuities- Deferred Non-Sub-TOI:

Variable

GMIR Change 2008 Product Name:

Project Name/Number: GMIR Change 2008/207-198

# **Disposition**

Disposition Date: 05/20/2008

Implementation Date:

Status: Accepted For Informational Purposes

Comment:

Rate data does NOT apply to filing.

 SERFF Tracking Number:
 NYLA-125649801
 State:
 Arkansas

 Filing Company:
 New York Life Insurance and Annuity
 State Tracking Number:
 39032

Corporation

Company Tracking Number: 207-198

TOI: A02I Individual Annuities- Deferred Non- Sub-TOI: A02I.003 Single Premium

Variable

Product Name: GMIR Change 2008

Project Name/Number: GMIR Change 2008/207-198

Item Type	Item Name	Item Status	Public Access
Supporting Document	Certification/Notice		Yes
Supporting Document	Application		No
Supporting Document	Life & Annuity - Acturial Memo		No
Supporting Document	207-198 Policy Data Page and SOV-Informational		Yes
Supporting Document	205-190 Policy Data Page and SOV-Informational		Yes
Supporting Document	204-180 Policy Data Page and SOV-Informational		Yes
Supporting Document	204-185 Policy Data Page and SOV-Informational		Yes
Supporting Document	Endorsement 6408-03 SOV 6408-03		Yes
Supporting Document	Endorsement 6408-05 SOV 6408-05		Yes
Supporting Document	Cover Letter		Yes

SERFF Tracking Number: NYLA-125649801 State: Arkansas

Filing Company: New York Life Insurance and Annuity State Tracking Number: 39032

Corporation

Company Tracking Number: 207-198

TOI: A02I Individual Annuities- Deferred Non- Sub-TOI: A02I.003 Single Premium

Variable

Product Name: GMIR Change 2008

Project Name/Number: GMIR Change 2008/207-198

# **Rate Information**

Rate data does NOT apply to filing.

NYLA-125649801 SERFF Tracking Number: State: Arkansas 39032 Filing Company: New York Life Insurance and Annuity State Tracking Number:

Corporation

Company Tracking Number: 207-198

TOI: Sub-TOI: A02I.003 Single Premium A02I Individual Annuities- Deferred Non-

Variable

GMIR Change 2008 Product Name:

Project Name/Number: GMIR Change 2008/207-198

# **Supporting Document Schedules**

**Review Status:** 

Certification/Notice Satisfied -Name: 05/16/2008

Comments: Attachment:

Cert-compliance-AR.pdf

**Review Status:** 

Application Bypassed -Name: 05/16/2008

N/A **Bypass Reason:** 

Comments:

**Review Status:** 

Life & Annuity - Acturial Memo Satisfied -Name: 05/16/2008

**Comments:** Attachments:

Actuarial Memo 207-198.pdf Actuarial Memo 204-180.pdf Actuarial Memo 204-185.pdf Actuarial Memo 204-186.pdf Actuarial Memo 205-190.pdf

Actuarial Memo 205-191.pdf

**Review Status:** 

Satisfied -Name: 207-198 Policy Data Page and 05/16/2008

**SOV-Informational** 

**Comments:** Attachments:

Data Page 207-198.pdf

SOV-Policy207-198.pdf

SERFF Tracking Number: NYLA-125649801 State: Arkansas 39032 Filing Company: New York Life Insurance and Annuity State Tracking Number:

Corporation

Company Tracking Number: 207-198

A02I Individual Annuities- Deferred Non-

Sub-TOI:

A02I.003 Single Premium

Variable

GMIR Change 2008 Product Name:

GMIR Change 2008/207-198 Project Name/Number:

**Review Status:** 

Satisfied -Name: 205-190 Policy Data Page and

**SOV-Informational** 

05/16/2008

05/16/2008

Comments:

TOI:

Attachments:

Data Page 205-190.pdf SOV-Policy205-190.pdf

**Review Status:** 

204-180 Policy Data Page and Satisfied -Name:

**SOV-Informational** 

**Comments:** 

Attachments:

Data Page 204-180.pdf SOV-Policy204-180.pdf

**Review Status:** 

204-185 Policy Data Page and Satisfied -Name:

**SOV-Informational** 

05/16/2008

**Comments:** 

Attachments:

Data Page 204-185.pdf SOV-Policy204-185.pdf

**Review Status:** 

Satisfied -Name: Endorsement 6408-03 SOV 6408-05/16/2008

03

Comments:

Attachments:

Endorsement-6408-03.pdf SOV-Endorsement 6408-03.pdf SERFF Tracking Number: NYLA-125649801 State: Arkansas 39032

State Tracking Number: Filing Company: New York Life Insurance and Annuity

Corporation

Company Tracking Number: 207-198

TOI: A02I Individual Annuities- Deferred Non-Sub-TOI: A02I.003 Single Premium

Variable

GMIR Change 2008 Product Name:

Project Name/Number: GMIR Change 2008/207-198

**Review Status:** 

Endorsement 6408-05 SOV 6408-Satisfied -Name: 05/16/2008

05

Comments:

Attachments:

Endorsement-6408-05.pdf

SOV-Endorsement 6408-05.pdf

**Review Status:** 

Cover Letter Satisfied -Name: 05/16/2008

**Comments:** 

Attachment:

Cover Letter-GMIR-2008-AR.pdf

# NEW YORK LIFE INSURANCE AND ANNUITY CORPORATION NEW YORK LIFE INSURANCE COMPANY

## **STATE OF ARKANSAS**

In Re: Form (s): 207-198, 205- 205-190, 205-191AR, 204-180, 204-185, and 204-186.50

I hereby certify that to the best of my knowledge and belief, the above forms contained in this informational filing complies with Arkansas Insurance Regulation 19.

Symme Wolf
Signature
Suzanne Wolf
Name
Assistant Vice President
Title
May 16, 2008
Date

## **New York Life Insurance and Annuity Corporation**

## **Single Premium Deferred Annuity**

**Form Number 207-198** 

## **Purpose and Scope**

This actuarial memorandum demonstrates compliance with the Standard Nonforfeiture Law for Individual Deferred Annuities (SNFL). The memorandum also illustrates the calculations used to determine benefits for this policy and describes the reserve methodology.

This memorandum is broken into the following sections:

- Brief description of the product
- Variables used in formulas in this memorandum
- Additional definitions
- Description of nonforfeiture interest rate methodology
- Description of Guaranteed Minimum Interest Rate (GMIR) methodology
- Description of Cash Surrender Value calculation
- Description of the minimum monthly annuity payments calculation
- Specimen calculation
- Description of reserves

## **I. Product Description**

This policy is a single premium deferred annuity intended to accumulate funds until monthly income payments begin on the Annuity Commencement date. Accumulation values for this policy will be calculated based on New York Life Insurance and Annuity Corporation's declared interest rates. The declared guaranteed interest rate will never be less than the applicable rate in the state in which policy is issued, as specified on the policy data page. Mortality rates, where applicable, are based on the 1983 Individual Annuity Mortality Table A with Projection Scale G.

## II. Variables

P	= Gross Premium
X	= Issue Age
Z	= Age, as defined in the policy, at the annuity commencement date
T	= Number of years to maturity
	= The greater of a and b where
	a = (70-x)
	b = 10
t	= Policy Year
G	= years in the Guaranteed Period
$i_t$	= Minimum nonforfeiture interest rate for policy year t (in decimal form)
$_{ m G}{ m i}_{ m t}$	= declared interest rate for the Guaranteed Period of G years
$PWt_d$	= Partial Withdrawal made during policy year t at withdrawal day d
$SURt_d$	= Surrender charge, if any, applied to partial withdrawal made during policy
	year t and withdrawal day d
$SCP_t$	= Surrender Charges for policy year t
	The annuitant can decide between two surrender charge schedules at issue:
	a. 6-Year schedule
	7.00% for $t=1, 2, 3$
	6.00 $t=4$
	5.00 t=5

4.00	t=6
0.00	t>6

b. 8-Year schedule

7.00%	for $t=1, 2, 3$
6.00	t=4
5.00	t=5
4.00	t=6
3.00	t=7
2.00	t=8
0.00	t>8

AV<sub>t</sub> = Accumulation Value at the end of policy year t ABV<sub>t</sub> = Accumulation Value at the beginning of policy year t

 $= AV_{t-1} - PWy_1 - SURy_1$ 

 $CSV_t$  = Cash Surrender Value at time t

MV = Accumulation Value projected to the maturity age using the declared rate for the remainder of the Guaranteed Period and the guaranteed minimum declared interest

rate thereafter

AD = Accumulation Value less any state premium tax payable on the

annuity commencement date

F<sub>z</sub> = Minimum monthly income factor per \$1,000 of proceeds at age z for equal lifetime payments, guaranteed to be paid for ten years, as stated

in the Life Income Guaranteed Period Payment Option Table of the policy

 $B_z$  = Amount of minimum monthly annuity payments beginning at age z

#### **III. Definitions**

Accumulation Value: The Accumulation Value equals the accumulation, at interest, of the Gross Premium less amounts withdrawn.

Cash Surrender Value: The Cash Surrender Value is equal to the greatest of:

1) the Accumulation Value minus the Surrender Charge;

- 2) the minimum Cash Surrender Value as outlined in Section 6 of the SNFL;
- 3) the Minimum Nonforfeiture Value (MNFV) as outlined in Section 4 of the SNFL; and
- 4) the Gross Premium, reduced by any previous partial withdrawals.

Guaranteed Period: The initial period or a subsequent period for which the company has declared an interest

rate. The available Guaranteed Periods are: 1) one year, 2) two years, 3) three years, and 5) six years. The Guaranteed Periods subsequent to the initial period are one year in duration. The declared rate for any Guaranteed Period will never be less than the guaranteed minimum interest rate (GMIR).

guaranteed minimum interest rate (Givint).

Minimum Nonforfeiture Value: The SNFL prescribes that the net premium for a given contract year used to

define the MNFV equals the accumulation, at the minimum nonforfeiture interest rate, of 87.5% of the Gross Premium less amounts withdrawn.

## IV. Minimum Nonforfeiture Interest Rate Methodology

I certify that this fixed annuity contract form is in compliance with the nonforfeiture requirements of the SNFL.

The methodology for determining the minimum nonforfeiture interest rate (i<sub>t</sub>) will be as follows:

- The minimum nonforfeiture interest rate will be determined twice a year in June and December for periods beginning July 1 and January 1, respectively;
- The minimum nonforfeiture interest rate is the lesser of three percent and the rate determined based on a six-month average of the five-year Constant Maturity Treasury Rate for December through May (for period beginning July 1) and June through November (for period beginning January 1);
- The six-month average CMT rate, rounded to the nearest 1/20th of one percent, will be reduced by 125 basis points, where the resulting interest rate is not less than one percent; and
- The minimum nonforfeiture interest rate is locked in for the life of the policy based on the rate in effect when the policy was issued.

Sample Calculation of Nonforfeiture Interest Rate (3.00% as of January 2008)

Month	Average Monthly 5 year CMT
June 2007	5.03%
July 2007	4.88%
August 2007	4.43%
September 2007	4.20%
October 2007	4.20%
November 2007	3.67%

Average Monthly 5 year CMT over a six month period (rounded to nearest 5bp) = 4.40% Reduced by 125 basis points = 3.15% Maximum of 3.00% = 3.00%

## V. GMIR Methodology

The guaranteed minimum interest rate (GMIR) is the minimum declared interest rate. The GMIR is guaranteed for the life of a policy based on the rate declared on the date of policy issue. The GMIR will be equal to or greater than the nonforfeiture interest rate.

## VI. Calculation of Policy Cash Surrender Value at end of Policy Year t

A. Calculation of the Accumulation Value at the end of Policy Year t

$$\begin{aligned} & For \ t = 0 & AV_t = P \\ & 365 & \\ Otherwise & AV_t = (AV_{t-1}) \ (1+{}_Gi_t) \ - \ \Sigma \ (PWt_d \ + SURt_d) \ (1+{}_Gi_t)^{(365-d)/365} \\ & d\text{-}1 & \end{aligned}$$

B. Calculation of the tabular Cash Surrender Value (Accumulation Values less Surrender Charges) at the end of policy year t on or before the annuity commencement date

$$tCSV_t = (AV_t - max(.10 \text{ x } ABV_t, .10 \text{ x } AV_t)) (1 - SCP_t) + max(.10 \text{ x } ABV_t, .10 \text{ x } AV_t)$$

if no partial withdrawals have been made during the policy year

$$=$$
 AV<sub>t</sub> (1 - SCP<sub>t</sub>)

if partial withdrawals equal to  $max(.10 \text{ x ABV}_t, .10 \text{ x AV}_t)$  have been made during the policy year

If P is at least \$100,000 then

$$tCSV_t = (AV_t - max(.10 \text{ x } ABV_t, .10 \text{ x } AV_t, ABV_t - P, AV_t - P)) (1 - SCP_t) + max(.10 \text{ x } ABV_t, .10 \text{ x } AV_t, ABV_t - P, AV_t - P)$$

The Actual Cash Surrender Value of the Contract will not be less than the initial premium payment less any previous partial withdrawals and surrender charges paid on those withdrawals.

C. Calculation of minimum Cash Surrender Value at the end of policy year t

$$\begin{aligned} \text{For } t &= T \\ t &< T \end{aligned} \qquad \begin{aligned} \text{mCSV}_T &= MV \\ \text{mCSV}_{t-1} &= MCSV_t \ x \ 1/(1+i_t+.01) \end{aligned}$$

D. Calculation of Minimum Nonforfeiture Value (MNFV) at the end of policy year t

$$\begin{array}{ll} For \ t = 0 & MNFV_0 = 0 \\ For \ t = 1 & MNFV_t = (MNFV_{t-1} + (P \ x \ .875)) \ x \ (1 + i_t) \\ For \ t > 1 & MNFV_t = (MNFV_{t-1} + 0) \ x \ (1 + i_t) \end{array}$$

E. Calculation of policy Cash Surrender Value at the end of policy year t

$$pCSVt = max(tCSV_t, mCSV_t, MNFV_t)$$

F. Calculation of the policy Cash Surrender Value at times other than the end of policy year t on or before the annuity commencement date

The calculation of the policy Cash Surrender Value at times other than the end of policy year t on or before the Annuity Commencement Date is exactly the same as the calculation of the policy Cash Surrender Value at the end of policy year t on or before the Annuity Commencement Date except that all interest accumulations are made to the date of the calculation instead of to the end of policy year.

## VII. Calculation of Minimum Monthly Annuity Payments

$$B_z = (AD) (F_z) (.001)$$

## VIIIa. Specimen Calculations

Calculation of Policy Cash Surrender Value at end of Policy Year y, where Minimum Nonforfeiture Interest Rate is related to the 5 year Constant Maturity Treasury Rate less 125 basis points

Assume:

Non-qualified policy Gross Premium: \$50,000 Policy issued to a male age 55

Guaranteed Minimum Interest Rate: 1.0% Minimum Nonforfeiture Interest Rate: 1.0% Annuity Commencement Date: Age 65 6-Year Surrender Charge Schedule

No j	partial	surrenders
------	---------	------------

Year of	Accumulation	Cash	Minimum Cash	Minimum Non-
Surrender	Value	Surrender Value	Surrender Value	Forfeiture Value
1	\$50,500.00	*\$50,000.00	\$46,214.92	\$44,187.50
2	51,005.00	*50,000.00	47,139.22	44,629.38
3	51,515.05	*50,000.00	48,082.00	45,075.67
4	52,030.20	*50,000.00	49,043.64	45,526.43
5	52,550.50	50,185.73	50,024.51	45,981.69
6	53,076.01	51,165.27	51,025.00	46,441.51
7	53,606.77	53,606.77	52,045.51	46,905.92
8	54,142.84	54,142.84	53,086.42	47,374.98
9	54,684.26	54,684.26	54,148.14	47,848.73
10	55,231.11	55,231.11	55,231.11	48,327.22

<sup>\*</sup> Cash Surrender Value must be greater than or equal to the initial premium payment since no partial withdrawals have been made.

The tabular cash surrender value of the policy is always greater than the greater of the minimum cash surrender value and the minimum nonforfeiture value of the policy.

## Calculation of Minimum Paid Up Annuity Values

 $\begin{array}{lll} AD &= \$55,\!231.11 & \text{(from Accumulation Value above)} \\ F_{65} &= 4.08 & \text{(from table in Payment of Policy Proceeds section of Policy;} \\ & \text{age adjustment} = -1) \end{array}$ 

 $B_{65} = (55,231.11)(4.08)(.001) = $225.34$ 

## **VIIIb. Specimen Calculations**

Calculation of Policy Cash Surrender Value at end of Policy Year y, where Minimum Nonforfeiture Interest Rate is related to the 5 year Constant Maturity Treasury Rate less 125 basis points

Assume:

Non-qualified policy Gross Premium: \$50,000 Policy issued to a male age 55

Guaranteed Minimum Interest Rate: 1.0% Minimum Nonforfeiture Interest Rate: 1.0% Annuity Commencement Date: Age 65 8-Year Surrender Charge Schedule

No partial surrenders

Year of	Accumulation	Cash	Minimum Cash	Minimum Non-
Surrender	Value	Surrender Value	Surrender Value	Forfeiture Value
1	\$50,500.00	*\$50,000.00	\$46,214.92	\$44,187.50
2	51,005.00	*50,000.00	47,139.22	44,629.38
3	51,515.05	*50,000.00	48,082.00	45,075.67
4	52,030.20	*50,000.00	49,043.64	45,526.43
5	52,550.50	50,185.73	50,024.51	45,981.69
6	53,076.01	51,165.27	51,025.00	46,441.51
7	53,606.77	52,159.38	52,045.51	46,905.92
8	54,142.84	53,168.26	53,086.42	47,374.98
9	54,684.26	54,684.26	54,148.14	47,848.73
10	55,231.11	55,231.11	55,231.11	48,327.22

<sup>\*</sup> Cash Surrender Value must be greater than or equal to the initial premium payment since no partial withdrawals have been made.

The tabular cash surrender value of the policy is always greater than the greater of the minimum cash surrender value and the minimum nonforfeiture value of the policy.

## Calculation of Minimum Paid Up Annuity Values

$$\begin{array}{ll} AD &= \$55,\!231.11 & \text{(from Accumulation Value above)} \\ F_{65} &= 4.08 & \text{(from table in Payment of Policy Proceeds section of Policy;} \\ &\text{age adjustment} = -1) \end{array}$$

$$B_{65} = (55,231.11)(4.08)(.001) = $225.34$$

All calculations for durations, ages, and sex other than those shown for the specimen calculations are determined in a manner consistent with the specimen calculations.

## IX. Reserves

The reserves held for this product are determined in accordance with the Standard Valuation Law. Statutory minimum standards will be met at all times for all values within the variable range. The methods and assumptions as specified by the Commissioners Annuity Reserve Valuation Method (CARVM) and the most recent NAIC interpretation of CARVM, Actuarial Guidelines XXXIII and XXXIV, are used to calculate reserves.

As required under Guideline XXXIV integrated benefit stream approach, any potential benefit stream is considered, including blends reflecting the interaction of more than one type of benefit. Such potential benefit streams include all types of benefits for which the greatest present value concept is required. In particular, we consider all elective benefits such as surrender, partial withdrawal and annuitization, as well as all non-elective benefits such as death, living benefits and unemployment.

#### **Valuation Interest**

The interest rate used in determining the minimum standard for valuation of this product shall be the calendar year statutory valuation interest as required by Actuarial Guideline XXXIII. Specifically the interest rate will be determined using the following "contract level" parameters:

- Issue year valuation basis
- With cash settlement option
- With no interest guarantees on considerations received more than one year after issue

The Guarantee Duration and Plan Type will be determined at the benefit level as required by Actuarial Guideline XXXIII.

The interest rate used in the valuation of surrender benefits for a 2007 year of issue for this form would be 4.75%. This corresponds to the rate for an Annuity with Guarantee Duration of 5 years or less – Plan Type C.

The interest rate used for Mortality and Morbidity for a 2007 year of issue for this form would be 5.50%. This corresponds to the rate for an Annuity with Guarantee Duration of 5 years or less – Plan Type A.

## **Valuation Mortality**

The valuation mortality basis for these forms shall conform to the Standard Valuation Law for these benefits. As of December 31, 2007 the mortality basis is the Annuity 2000 Table.

George E. Silos, FSA, MAAA

Hay E. Silos

## **New York Life Insurance and Annuity Corporation**

## **Flexible Premium Deferred Annuity**

**Form Number 204-180** 

## **Purpose and Scope**

This actuarial memorandum demonstrates compliance with the Standard Nonforfeiture Law for Individual Deferred Annuities (SNFL). The memorandum also illustrates the calculations used to determine benefits for this policy and describes the reserve methodology.

This memorandum is broken into the following sections:

- Brief description of the product
- Variables used in formulas in this memorandum
- Additional definitions
- Description of nonforfeiture interest rate methodology
- Description of Guaranteed Minimum Interest Rate (GMIR) methodology
- Description of Cash Surrender Value calculation
- Description of the minimum monthly annuity payments calculation
- Specimen calculation
- Description of reserves

## **I. Product Description**

This policy is a flexible premium deferred annuity intended to accumulate funds until monthly income payments begin on the Annuity Commencement date. Accumulation values for this policy will be calculated based on New York Life Insurance and Annuity Corporation's declared interest rates. The declared guaranteed interest rate will never be less than the applicable rate in the state in which policy is issued, as specified on the policy data page. Mortality rates, where applicable, are based on the 1983 Individual Annuity Mortality Table A with Projection Scale G.

## II. Variables

X	= Issue Age	
Z	= Age, as defined in the policy, at the annuity commencement date	
T	= Number of years to maturity	
	= The greater of a and b where	
	a = (70-x)	
	b = 10	
t	= Policy Year	
y	= Policy Month	
Pt <sub>y</sub>	= Gross Premium paid at beginning of policy month y of policy year t	
G	= years in the Guaranteed Period	
$\mathbf{i}_{t}$	= Minimum nonforfeiture interest rate for policy year t (in decimal form)	
$_{ m G}{ m i}_{ m t}$	= declared interest rate for the Guaranteed Period of G years	
$PWt_d$	= Partial Withdrawal made during policy year t at withdrawal day d	
$SURt_d$	= Surrender charge, if any, applied to partial withdrawal made during policy	
	year t and withdrawal day d	
$SCP_t$	= Surrender Charges for policy year t	
	7.00% for t<4	
	6.00 $t=4$	
	5.00 $t=5$	
	4.00 t=6	

3.00	t=7
2.00	t=8
1.00	t=9
0.00	t>9

AF<sub>t</sub> = Administration fee calculated at the end of policy year t, but deduced at the beginning of policy year t+1 or upon surrender of the policy during policy year t

= 0 if t=1= lesser of \$30 or 2% of ABV<sub>t</sub> if ABV<sub>t</sub> < \$10,000 and t>1

= 0 if ABV<sub>t</sub> > \$9,999.99 and t>1

AV<sub>t</sub> = Accumulation Value at the end of policy year t ABV<sub>t</sub> = Accumulation Value at the beginning of policy year t

 $= AV_{t-1} - AF_{t-1} - PWy_1 - SURy_1$ 

 $CSV_t$  = Cash Surrender Value at time t

MV = Accumulation Value projected to the maturity age using the declared rate for the

remainder of the Guaranteed Period and the guaranteed minimum declared interest

rate thereafter

AD = Accumulation Value less any state premium tax payable on the

annuity commencement date

 $F_z$  = Minimum monthly income factor per \$1,000 of proceeds at age z for

equal lifetime payments, guaranteed to be paid for ten years, as stated

in the Life Income Guaranteed Period Payment Option Table of the policy

 $B_z$  = Amount of minimum monthly annuity payments beginning at age z

#### III. Definitions

Accumulation Value: The Accumulation Value equals the accumulation, at interest, of the Gross Premiums

less amounts withdrawn.

Cash Surrender Value: The Cash Surrender Value is equal to the greatest of:

1) the Accumulation Value minus the Surrender Charge;

2) the minimum Cash Surrender Value as outlined in Section 6 of the SNFL;

3) the Minimum Nonforfeiture Value (MNFV) as outlined in Section 4 of the SNFL; and

4) the initial Gross Premium, reduced by any previous partial withdrawals.

Guaranteed Period: The initial period or a subsequent period for which the company has declared an interest

rate. The initial Guaranteed Period is one year in duration. The Guaranteed Periods subsequent to the initial period are one year in duration. The declared rate for any Guaranteed Period will never be less than the guaranteed minimum interest rate

(GMIR).

Minimum Nonforfeiture Value: The SNFL prescribes that the net premium for a given contract year used to

define the MNFV equals the accumulation, at the minimum nonforfeiture interest rate, of 87.5% of the Gross Premiums credited to the contract during

that contact year, less amounts withdrawn.

#### IV. Minimum Nonforfeiture Interest Rate Methodology

I certify that this fixed annuity contract form is in compliance with the nonforfeiture requirements of the SNFL.

The methodology for determining the minimum nonforfeiture interest rate (i<sub>1</sub>) will be as follows:

- The minimum nonforfeiture interest rate will be determined twice a year in June and December for periods beginning July 1 and January 1, respectively;
- The minimum nonforfeiture interest rate is the lesser of three percent and the rate determined based on a six-month average of the five-year Constant Maturity Treasury Rate for December through May (for period beginning July 1) and June through November (for period beginning January 1);
- The six-month average CMT rate, rounded to the nearest 1/20th of one percent, will be reduced by 125 basis points, where the resulting interest rate is not less than one percent; and
- The minimum nonforfeiture interest rate is locked in for the life of the policy based on the rate in effect when the policy was issued.

Sample Calculation of Nonforfeiture Interest Rate (3.00% as of January 2008)

Month	Average Monthly 5 year CMT
June 2007	5.03%
July 2007	4.88%
August 2007	4.43%
September 2007	4.20%
October 2007	4.20%
November 2007	3.67%

Average Monthly 5 year CMT over a six month period (rounded to nearest 5bp) = 4.40% Reduced by 125 basis points = 3.15% Maximum of 3.00% = 3.00%

## V. GMIR Methodology

The guaranteed minimum interest rate (GMIR) is the minimum declared interest rate. The GMIR is guaranteed for the life of a policy based on the rate declared on the date of policy issue. The GMIR will be equal to or greater than the nonforfeiture interest rate.

## VI. Calculation of Policy Cash Surrender Value at end of Policy Year t

A. Calculation of the Accumulation Value at the end of Policy Year t

For t=1

$$AV_{1} = \sum_{y=1}^{12} (Pt_{y})(1+i_{y})^{\frac{(13-y)}{12}} - \sum_{d=1}^{365} (PWt_{d} + SURt_{d})(1+i_{y})^{\frac{(365-d)}{365}}$$

For t>1

$$AV_{t} = \sum_{y=1}^{12} (Pt_{y})(1+i_{y})^{\frac{(13-y)}{12}} - \sum_{d=1}^{365} (PWt_{d} + SURt_{d})(1+i_{y})^{\frac{(365-d)}{365}} + (ABV_{t})(1+i_{y})^{\frac{(13-y)}{365}}$$

B. Calculation of the tabular Cash Surrender Value (Accumulation Values less Surrender Charges) at the end of policy year t on or before the annuity commencement date

For t = 1

$$tCSV_t = (AV_t - max(.10 \text{ x Pt}_1, .10 \text{ x AV}_t)) (1 - SCP_t) + max(.10 \text{ x Pt}_1, .10 \text{ x AV}_t)$$

if no partial withdrawals have been made during the policy year

$$=$$
 AV<sub>t</sub> (1 - SCP<sub>t</sub>)

if partial withdrawals equal to  $max(.10 \text{ x Pt}_1, .10 \text{ x AV}_t)$  have been made during the policy year

For t > 1

$$tCSV_t = (AV_t - max(.10 \text{ x }ABV_t, .10 \text{ x }AV_t)) (1 - SCP_t) + max(.10 \text{ x }ABV_t, .10 \text{ x }AV_t) - AF_t$$

if no partial withdrawals have been made during the policy year

$$=$$
  $AV_t (1 - SCP_t) - AF_t$ 

if partial withdrawals equal to  $max(.10 \text{ x ABV}_t, .10 \text{ x AV}_t)$  have been made during the policy year

If  $\Sigma Pt_v$  is at least \$100,000 then

 $tCSV_t = the greater of the amount calculated using the formula above and$ 

$$(ABV_{t} - \sum_{s=1}^{t-1} Ps_{y}) + (AV_{t} - (ABV_{t} - \sum_{s=1}^{t-1} Ps_{y})) \times (1 - SCP_{t})$$

The Actual Cash Surrender Value of the Contract will not be less than the initial premium payment less any previous partial withdrawals and surrender charges paid on those withdrawals.

C. Calculation of minimum Cash Surrender Value at the end of policy year t

$$\begin{aligned} For \ t &= T \\ t &< T \end{aligned} \qquad \begin{aligned} mCSV_T &= MV \\ mCSV_{t-1} &= MCSV_t \ x \ (1/(1+i_t+.01))^{1/12} \ \text{- Pt}_y \end{aligned}$$

D. Calculation of Minimum Nonforfeiture Value (MNFV) at the end of policy year t

For t = 0 
$$MNFV_0 = 0$$
$$For t > 0 \qquad MNFV_t = [(MNFV_{t-1}) \times (1+i_y)] + .875 \sum_{y=1}^{12} (Pt_y)(1+i_y)^{\frac{(13-y)}{12}}$$

E. Calculation of policy Cash Surrender Value at the end of policy year t

$$pCSVt = max(tCSV_t, mCSV_t, MNFV_t)$$

F. Calculation of the policy Cash Surrender Value at times other than the end of policy year t on or before the annuity commencement date

The calculation of the policy Cash Surrender Value at times other than the end of policy year t on or before the Annuity Commencement Date is exactly the same as the calculation of the policy Cash Surrender Value at the end of policy year t on or before the Annuity Commencement Date except that all interest accumulations are made to the date of the calculation instead of to the end of policy year.

# VII. Calculation of Minimum Monthly Annuity Payments

$$B_z = (AD) (F_z) (.001)$$

## **VIII. Specimen Calculations**

Calculation of Policy Cash Surrender Value at end of Policy Year y, where Minimum Nonforfeiture Interest Rate is related to the 5 year Constant Maturity Treasury Rate less 125 basis points

Assume:

Non-qualified policy

Gross Premium: \$50,000 initially, \$1,000 annually thereafter

Policy issued to a male age 55

Guaranteed Minimum Interest Rate: 1.0% Minimum Nonforfeiture Interest Rate: 1.0% Annuity Commencement Date: Age 65

No partial surrenders

Year of	Accumulation	Cash	Minimum Cash	Minimum Non-
Surrender	Value	Surrender Value	Surrender Value	Forfeiture Value
1	\$50,500.00	*\$50,000.00	\$45,806.99	\$44,187.50
2	52,015.00	*50,000.00	47,743.13	45,513.13
3	53,545.15	50,171.81	49,718.00	46,852.01
4	55,090.60	52,115.71	51,732.36	48,204.28
5	56,651.51	54,102.19	53,787.00	49,570.07
6	58,228.02	56,131.81	55,882.74	50,949.52
7	59,820.30	58,205.15	58,020.40	52,342.76
8	61,428.51	60,322.79	60,200.81	53,749.94
9	63,052.79	62,485.32	62,424.82	55,171.19
10	64,693.32	64,693.32	64,693.32	56,606.65

<sup>\*</sup> Cash Surrender Value must be greater than or equal to the initial premium payment since no partial withdrawals have been made.

The tabular cash surrender value of the policy is always greater than the greater of the minimum cash surrender value and the minimum nonforfeiture value of the policy.

## Calculation of Minimum Paid Up Annuity Values

AD = \$64,693.32 (from Accumulation Value above)  $F_{65} = 4.08$  (from table in Payment of Policy Proceeds section of Policy; age adjustment = -1)

 $B_{65} = (64,693.32)(4.08)(.001) = $263.95$ 

All calculations for durations, ages, and sex other than those shown for the specimen calculations are determined in a manner consistent with the specimen calculations.

## IX. Reserves

The reserves held for this product are determined in accordance with the Standard Valuation Law. Statutory minimum standards will be met at all times for all values within the variable range. The methods and assumptions as specified by the Commissioners Annuity Reserve Valuation Method (CARVM) and the most recent NAIC interpretation of CARVM, Actuarial Guidelines XXXIII and XXXIV, are used to calculate reserves.

As required under Guideline XXXIV integrated benefit stream approach, any potential benefit stream is considered, including blends reflecting the interaction of more than one type of benefit. Such potential benefit streams include all types of benefits for which the greatest present value concept is required. In particular, we consider all elective benefits such as surrender, partial withdrawal and annuitization, as well as all non-elective benefits such as death, living benefits and unemployment.

#### **Valuation Interest**

The interest rate used in determining the minimum standard for valuation of this product shall be the calendar year statutory valuation interest as required by Actuarial Guideline XXXIII. Specifically the interest rate will be determined using the following "contract level" parameters:

- Issue year valuation basis
- With cash settlement option
- With no interest guarantees on considerations received more than one year after issue

The Guarantee Duration and Plan Type will be determined at the benefit level as required by Actuarial Guideline XXXIII.

The interest rate used in the valuation of surrender benefits for a 2007 year of issue for this form would be 4.75%. This corresponds to the rate for an Annuity with Guarantee Duration of 5 years or less – Plan Type C.

The interest rate used for Mortality and Morbidity for a 2007 year of issue for this form would be 5.50%. This corresponds to the rate for an Annuity with Guarantee Duration of 5 years or less – Plan Type A.

## **Valuation Mortality**

The valuation mortality basis for these forms shall conform to the Standard Valuation Law for these benefits. As of December 31, 2007 the mortality basis is the Annuity 2000 Table.

George E. Silos, FSA, MAAA

Hay E. Silos

## **New York Life Insurance and Annuity Corporation**

## **Single Premium Deferred Annuity**

**Form Number 204-185** 

## **Purpose and Scope**

This actuarial memorandum demonstrates compliance with the Standard Nonforfeiture Law for Individual Deferred Annuities (SNFL). The memorandum also illustrates the calculations used to determine benefits for this policy and describes the reserve methodology.

This memorandum is broken into the following sections:

- Brief description of the product
- Variables used in formulas in this memorandum
- Additional definitions
- Description of nonforfeiture interest rate methodology
- Description of Guaranteed Minimum Interest Rate (GMIR) methodology
- Description of Cash Surrender Value calculation
- Description of the minimum monthly annuity payments calculation
- Specimen calculation
- Description of reserves

## **I. Product Description**

This policy is a single premium deferred annuity intended to accumulate funds until monthly income payments begin on the Annuity Commencement date. Accumulation values for this policy will be calculated based on New York Life Insurance and Annuity Corporation's declared interest rates. The declared guaranteed interest rate will never be less than the applicable rate in the state in which policy is issued, as specified on the policy data page. Mortality rates, where applicable, are based on the 1983 Individual Annuity Mortality Table A with Projection Scale G.

## II. Variables

P	= Gross Premium		
X	= Issue Age		
Z	= Age, as defined in the policy, at the annuity commencement date		
T	= Number of years to maturity		
	= The greater of a and b where		
	a = (70-x)		
	b = 10		
t	= Policy Year		
G	= years in the Guaranteed Period		
$i_t$	= Minimum nonforfeiture interest rate for policy year t (in decimal form)		
$_{ m G}{f i}_{ m t}$	= declared interest rate for the Guaranteed Period of G years		
$PWt_d$	= Partial Withdrawal made during policy year t at withdrawal day d		
$SURt_d$	= Surrender charge, if any, applied to partial withdrawal made during policy		
	year t and withdrawal day d		
$SCP_t$	= Surrender Charges for policy year t		
	7.00% for t<4		
	6.00 t=4		
	5.00 t=5		
	4.00 t=6		
	0.00 t>6		

 $AV_t$  = Accumulation Value at the end of policy year t  $ABV_t$  = Accumulation Value at the beginning of policy year t

 $=AV_{t-1}-PWy_1-SURy_1$ 

 $CSV_t$  = Cash Surrender Value at time t

MV = Accumulation Value projected to the maturity age using the declared rate for the

remainder of the Guaranteed Period and the guaranteed minimum declared interest

rate thereafter

AD = Accumulation Value less any state premium tax payable on the

annuity commencement date

 $F_z$  = Minimum monthly income factor per \$1,000 of proceeds at age z for

equal lifetime payments, guaranteed to be paid for ten years, as stated in the Life Income Guaranteed Period Payment Option Table of the policy

 $B_z$  = Amount of minimum monthly annuity payments beginning at age z

#### III. Definitions

Accumulation Value: The Accumulation Value equals the accumulation, at interest, of the Gross Premium

less amounts withdrawn.

Cash Surrender Value: The Cash Surrender Value is equal to the greatest of:

1) the Accumulation Value minus the Surrender Charge;

2) the minimum Cash Surrender Value as outlined in Section 6 of the SNFL;

3) the Minimum Nonforfeiture Value (MNFV) as outlined in Section 4 of the SNFL: and

4) the Gross Premium, reduced by any previous partial withdrawals.

Guaranteed Period: The initial period or a subsequent period for which the company has declared an interest

rate. The available Guaranteed Periods are: 1) one year, 2) two years, 3) three years, and 5) six years. The Guaranteed Periods subsequent to the initial period are one year in duration. The declared rate for any Guaranteed Period will never be less than the

guaranteed minimum interest rate (GMIR).

Minimum Nonforfeiture Value: The SNFL prescribes that the net premium for a given contract year used to

define the MNFV equals the accumulation, at the minimum nonforfeiture interest rate, of 87.5% of the Gross Premium less amounts withdrawn.

## IV. Minimum Nonforfeiture Interest Rate Methodology

I certify that this fixed annuity contract form is in compliance with the nonforfeiture requirements of the SNFL.

The methodology for determining the minimum nonforfeiture interest rate (i<sub>t</sub>) will be as follows:

- The minimum nonforfeiture interest rate will be determined twice a year in June and December for periods beginning July 1 and January 1, respectively;
- The minimum nonforfeiture interest rate is the lesser of three percent and the rate determined based on a six-month average of the five-year Constant Maturity Treasury Rate for December through May (for period beginning July 1) and June through November (for period beginning January 1);
- The six-month average CMT rate, rounded to the nearest 1/20th of one percent, will be reduced by 125 basis points, where the resulting interest rate is not less than one percent; and
- The minimum nonforfeiture interest rate is locked in for the life of the policy based on the rate in effect when the policy was issued.

Sample Calculation of Nonforfeiture Interest Rate (3.00% as of January 2008)

Month	Average Monthly 5 year CMT
June 2007	5.03%
July 2007	4.88%
August 2007	4.43%
September 2007	4.20%
October 2007	4.20%
November 2007	3.67%

Average Monthly 5 year CMT over a six month period (rounded to nearest 5bp) = 4.40% Reduced by 125 basis points = 3.15% Maximum of 3.00% = 3.00%

## V. GMIR Methodology

The guaranteed minimum interest rate (GMIR) is the minimum declared interest rate. The GMIR is guaranteed for the life of a policy based on the rate declared on the date of policy issue. The GMIR will be equal to or greater than the nonforfeiture interest rate.

## VI. Calculation of Policy Cash Surrender Value at end of Policy Year t

A. Calculation of the Accumulation Value at the end of Policy Year t

For 
$$t = 0$$
  $AV_t = P$   $365$  Otherwise  $AV_t = (AV_{t-1}) (1 + _Gi_t) - \sum_{d-1} (PWt_d + SURt_d) (1 + _Gi_t)^{(365-d)/365}$ 

B. Calculation of the tabular Cash Surrender Value (Accumulation Values less Surrender Charges) at the end of policy year t on or before the annuity commencement date

$$tCSV_t = (AV_t - max(.10 \text{ x } ABV_t, .10 \text{ x } AV_t)) (1 - SCP_t) + max(.10 \text{ x } ABV_t, .10 \text{ x } AV_t)$$

if no partial withdrawals have been made during the policy year

$$=$$
 AV<sub>t</sub> (1 - SCP<sub>t</sub>)

if partial withdrawals equal to max(.10 x  $ABV_t$ , .10 x  $AV_t$ ) have been made during the policy year

If P is at least \$100,000 then

$$tCSV_t = (AV_t - max(.10 \text{ x } ABV_t, .10 \text{ x } AV_t, ABV_t - P, AV_t - P)) (1 - SCP_t) + max(.10 \text{ x } ABV_t, .10 \text{ x } AV_t, ABV_t - P, AV_t - P)$$

The Actual Cash Surrender Value of the Contract will not be less than the initial premium payment less any previous partial withdrawals and surrender charges paid on those withdrawals.

C. Calculation of minimum Cash Surrender Value at the end of policy year t

$$\begin{aligned} For \ t &= T \\ t &< T \end{aligned} \qquad \begin{aligned} mCSV_T &= MV \\ mCSV_{t-1} &= MCSV_t \ x \ 1/(1+i_t+.01) \end{aligned}$$

D. Calculation of Minimum Nonforfeiture Value (MNFV) at the end of policy year t

$$\begin{array}{ll} For \; t = 0 & MNFV_0 = 0 \\ For \; t = 1 & MNFV_t = (MNFV_{t-1} + (P \; x \; .875)) \; x \; (1 + i_t) \\ For \; t > 1 & MNFV_t = (MNFV_{t-1} + 0) \; x \; (1 + i_t) \end{array}$$

E. Calculation of policy Cash Surrender Value at the end of policy year t

$$pCSVt = max(tCSV_t, mCSV_t, MNFV_t)$$

F. Calculation of the policy Cash Surrender Value at times other than the end of policy year t on or before the annuity commencement date

The calculation of the policy Cash Surrender Value at times other than the end of policy year t on or before the Annuity Commencement Date is exactly the same as the calculation of the policy Cash Surrender Value at the end of policy year t on or before the Annuity Commencement Date except that all interest accumulations are made to the date of the calculation instead of to the end of policy year.

## VII. Calculation of Minimum Monthly Annuity Payments

$$B_z = (AD) (F_z) (.001)$$

## **VIII. Specimen Calculations**

Calculation of Policy Cash Surrender Value at end of Policy Year y, where Minimum Nonforfeiture Interest Rate is related to the 5 year Constant Maturity Treasury Rate less 125 basis points

Assume:

Non-qualified policy Gross Premium: \$50,000 Policy issued to a male age 55

Guaranteed Minimum Interest Rate: 1.0% Minimum Nonforfeiture Interest Rate: 1.0% Annuity Commencement Date: Age 65

No partial surrenders

Year of	Accumulation	Cash	Minimum Cash	Minimum Non-
Surrender	Value	Surrender Value	Surrender Value	Forfeiture Value
1	\$50,500.00	*\$50,000.00	\$46,214.92	\$44,187.50
2	51,005.00	*50,000.00	47,139.22	44,629.38
3	51,515.05	*50,000.00	48,082.00	45,075.67
4	52,030.20	*50,000.00	49,043.64	45,526.43
5	52,550.50	50,185.73	50,024.51	45,981.69
6	53,076.01	51,165.27	51,025.00	46,441.51
7	53,606.77	53,606.77	52,045.51	46,905.92
8	54,142.84	54,142.84	53,086.42	47,374.98
9	54,684.26	54,684.26	54,148.14	47,848.73
10	55,231.11	55,231.11	55,231.11	48,327.22

<sup>\*</sup> Cash Surrender Value must be greater than or equal to the initial premium payment since no partial withdrawals have been made.

The tabular cash surrender value of the policy is always greater than the greater of the minimum cash surrender value and the minimum nonforfeiture value of the policy.

## Calculation of Minimum Paid Up Annuity Values

$$\begin{array}{lll} AD &=\$55,\!231.11 & \text{(from Accumulation Value above)} \\ F_{65} &= 4.08 & \text{(from table in Payment of Policy Proceeds section of Policy;} \\ &&\text{age adjustment} = -1) \end{array}$$

$$B_{65} = (55,231.11)(4.08)(.001) = $225.34$$

All calculations for durations, ages, and sex other than those shown for the specimen calculations are determined in a manner consistent with the specimen calculations.

## IX. Reserves

The reserves held for this product are determined in accordance with the Standard Valuation Law. Statutory minimum standards will be met at all times for all values within the variable range. The methods and assumptions as specified by the Commissioners Annuity Reserve Valuation Method (CARVM) and the most recent NAIC interpretation of CARVM, Actuarial Guidelines XXXIII and XXXIV, are used to calculate reserves.

As required under Guideline XXXIV integrated benefit stream approach, any potential benefit stream is considered, including blends reflecting the interaction of more than one type of benefit. Such potential benefit streams include all types of benefits for which the greatest present value concept is required. In particular, we consider all elective benefits such as surrender, partial withdrawal and annuitization, as well as all non-elective benefits such as death, living benefits and unemployment.

#### **Valuation Interest**

The interest rate used in determining the minimum standard for valuation of this product shall be the calendar year statutory valuation interest as required by Actuarial Guideline XXXIII. Specifically the interest rate will be determined using the following "contract level" parameters:

- Issue year valuation basis
- With cash settlement option
- With no interest guarantees on considerations received more than one year after issue

The Guarantee Duration and Plan Type will be determined at the benefit level as required by Actuarial Guideline XXXIII.

The interest rate used in the valuation of surrender benefits for a 2007 year of issue for this form would be 4.75%. This corresponds to the rate for an Annuity with Guarantee Duration of 5 years or less – Plan Type C.

The interest rate used for Mortality and Morbidity for a 2007 year of issue for this form would be 5.50%. This corresponds to the rate for an Annuity with Guarantee Duration of 5 years or less – Plan Type A.

## **Valuation Mortality**

The valuation mortality basis for these forms shall conform to the Standard Valuation Law for these benefits. As of December 31, 2007 the mortality basis is the Annuity 2000 Table.

George E. Silos, FSA, MAAA

Hay E. Silos

## **New York Life Insurance and Annuity Corporation**

## **Single Premium Deferred Annuity**

**Form Number 204-186** 

## Purpose and Scope

This actuarial memorandum demonstrates compliance with the Standard Nonforfeiture Law for Individual Deferred Annuities (SNFL). The memorandum also illustrates the calculations used to determine benefits for this policy and describes the reserve methodology.

This memorandum is broken into the following sections:

- Brief description of the product
- Variables used in formulas in this memorandum
- Additional definitions
- Description of nonforfeiture interest rate methodology
- Description of Guaranteed Minimum Interest Rate (GMIR) methodology
- Description of Cash Surrender Value calculation
- Description of the minimum monthly annuity payments calculation
- Specimen calculation
- Description of reserves

## **I. Product Description**

This policy is a single premium deferred annuity intended to accumulate funds until monthly income payments begin on the Annuity Commencement date. Accumulation values for this policy will be calculated based on New York Life Insurance and Annuity Corporation's declared interest rates. The declared guaranteed interest rate will never be less than the applicable rate in the state in which policy is issued, as specified on the policy data page. Mortality rates, where applicable, are based on the 1983 Individual Annuity Mortality Table A with Projection Scale G.

## II. Variables

P	= Gross Premium
X	= Issue Age
Z	= Age, as defined in the policy, at the annuity commencement date
T	= Number of years to maturity
	= The greater of a and b where
	a = (70-x)
	b = 10
t	= Policy Year
G	= years in the Guaranteed Period
$\mathbf{i}_{t}$	= Minimum nonforfeiture interest rate for policy year t (in decimal form)
$_{ m G}{ m i}_{ m t}$	= declared interest rate for the Guaranteed Period of G years
$PWt_d$	= Partial Withdrawal made during policy year t at withdrawal day d
$SURt_d$	= Surrender charge, if any, applied to partial withdrawal made during policy
	year t and withdrawal day d
$SCP_t$	= Surrender Charges for policy year t
	7.00% for t<4
	6.00 t=4
	5.00 t=5
	4.00
	0.00 t>6

AV<sub>t</sub> = Accumulation Value at the end of policy year t ABV<sub>t</sub> = Accumulation Value at the beginning of policy year t

 $=AV_{t-1}-PWy_1-SURy_1$ 

 $CSV_t$  = Cash Surrender Value at time t

MV = Accumulation Value projected to the maturity age using the declared rate for the

remainder of the Guaranteed Period and the guaranteed minimum declared interest

rate thereafter

AD = Accumulation Value less any state premium tax payable on the

annuity commencement date

 $F_z$  = Minimum monthly income factor per \$1,000 of proceeds at age z for

equal lifetime payments, guaranteed to be paid for ten years, as stated in the Life Income Guaranteed Period Payment Option Table of the policy

 $B_z$  = Amount of minimum monthly annuity payments beginning at age z

#### III. Definitions

Accumulation Value: The Accumulation Value equals the accumulation, at interest, of the Gross Premium

less amounts withdrawn.

Cash Surrender Value: The Cash Surrender Value is equal to the greatest of:

1) the Accumulation Value minus the Surrender Charge;

2) the minimum Cash Surrender Value as outlined in Section 6 of the SNFL;

3) the Minimum Nonforfeiture Value (MNFV) as outlined in Section 4 of the SNFL: and

4) the Gross Premium, reduced by any previous partial withdrawals.

Guaranteed Period: The initial period or a subsequent period for which the company has declared an interest

rate. The available Guaranteed Periods are: 1) one year, 2) two years, 3) three years, and 5) six years. The Guaranteed Periods subsequent to the initial period are one year in duration. The declared rate for any Guaranteed Period will never be less than the

guaranteed minimum interest rate (GMIR).

Minimum Nonforfeiture Value: The SNFL prescribes that the net premium for a given contract year used to

define the MNFV equals the accumulation, at the minimum nonforfeiture interest rate, of 87.5% of the Gross Premium less amounts withdrawn.

## IV. Minimum Nonforfeiture Interest Rate Methodology

I certify that this fixed annuity contract form is in compliance with the nonforfeiture requirements of the SNFL.

The methodology for determining the minimum nonforfeiture interest rate (i<sub>t</sub>) will be as follows:

- The minimum nonforfeiture interest rate will be determined twice a year in June and December for periods beginning July 1 and January 1, respectively;
- The minimum nonforfeiture interest rate is the lesser of three percent and the rate determined based on a six-month average of the five-year Constant Maturity Treasury Rate for December through May (for period beginning July 1) and June through November (for period beginning January 1);
- The six-month average CMT rate, rounded to the nearest 1/20th of one percent, will be reduced by 125 basis points, where the resulting interest rate is not less than one percent; and
- The minimum nonforfeiture interest rate is locked in for the life of the policy based on the rate in effect when the policy was issued.

Sample Calculation of Nonforfeiture Interest Rate (3.00% as of January 2008)

Month	Average Monthly 5 year CMT
June 2007	5.03%
July 2007	4.88%
August 2007	4.43%
September 2007	4.20%
October 2007	4.20%
November 2007	3.67%

Average Monthly 5 year CMT over a six month period (rounded to nearest 5bp) = 4.40% Reduced by 125 basis points = 3.15% Maximum of 3.00% = 3.00%

## V. GMIR Methodology

The guaranteed minimum interest rate (GMIR) is the minimum declared interest rate. The GMIR is guaranteed for the life of a policy based on the rate declared on the date of policy issue. The GMIR will be equal to or greater than the nonforfeiture interest rate.

## VI. Calculation of Policy Cash Surrender Value at end of Policy Year t

A. Calculation of the Accumulation Value at the end of Policy Year t

For 
$$t = 0$$
  $AV_t = P$   $365$  Otherwise  $AV_t = (AV_{t-1}) (1 + {}_{G}i_t) - \sum_{d-1} (PWt_d + SURt_d) (1 + {}_{G}i_t)^{(365-d)/365}$ 

B. Calculation of the tabular Cash Surrender Value (Accumulation Values less Surrender Charges) at the end of policy year t on or before the annuity commencement date

$$tCSV_t = (AV_t - max(.10 \text{ x } ABV_t, .10 \text{ x } AV_t)) (1 - SCP_t) + max(.10 \text{ x } ABV_t, .10 \text{ x } AV_t)$$

if no partial withdrawals have been made during the policy year

$$=$$
 AV<sub>t</sub> (1 - SCP<sub>t</sub>)

if partial withdrawals equal to max(.10 x  $ABV_t$ , .10 x  $AV_t$ ) have been made during the policy year

If P is at least \$100,000 then

$$tCSV_t = (AV_t - max(.10 \text{ x } ABV_t, .10 \text{ x } AV_t, ABV_t - P, AV_t - P)) (1 - SCP_t) + max(.10 \text{ x } ABV_t, .10 \text{ x } AV_t, ABV_t - P, AV_t - P)$$

The Actual Cash Surrender Value of the Contract will not be less than the initial premium payment less any previous partial withdrawals and surrender charges paid on those withdrawals.

C. Calculation of minimum Cash Surrender Value at the end of policy year t

$$\begin{aligned} For \ t &= T \\ t &< T \end{aligned} \qquad \begin{aligned} mCSV_T &= MV \\ mCSV_{t-1} &= MCSV_t \ x \ 1/(1+i_t+.01) \end{aligned}$$

D. Calculation of Minimum Nonforfeiture Value (MNFV) at the end of policy year t

$$\begin{array}{ll} For \; t = 0 & MNFV_0 = 0 \\ For \; t = 1 & MNFV_t = (MNFV_{t-1} + (P \; x \; .875)) \; x \; (1 + i_t) \\ For \; t > 1 & MNFV_t = (MNFV_{t-1} + 0) \; x \; (1 + i_t) \end{array}$$

E. Calculation of policy Cash Surrender Value at the end of policy year t

$$pCSVt = max(tCSV_t, mCSV_t, MNFV_t)$$

F. Calculation of the policy Cash Surrender Value at times other than the end of policy year t on or before the annuity commencement date

The calculation of the policy Cash Surrender Value at times other than the end of policy year t on or before the Annuity Commencement Date is exactly the same as the calculation of the policy Cash Surrender Value at the end of policy year t on or before the Annuity Commencement Date except that all interest accumulations are made to the date of the calculation instead of to the end of policy year.

## VII. Calculation of Minimum Monthly Annuity Payments

$$B_z = (AD) (F_z) (.001)$$

## **VIII. Specimen Calculations**

Calculation of Policy Cash Surrender Value at end of Policy Year y, where Minimum Nonforfeiture Interest Rate is related to the 5 year Constant Maturity Treasury Rate less 125 basis points

Assume:

Non-qualified policy Gross Premium: \$50,000 Policy issued to a male age 55

Guaranteed Minimum Interest Rate: 1.0% Minimum Nonforfeiture Interest Rate: 1.0% Annuity Commencement Date: Age 65

No partial surrenders

Year of	Accumulation	Cash	Minimum Cash	Minimum Non-
Surrender	Value	Surrender Value	Surrender Value	Forfeiture Value
1	\$50,500.00	*\$50,000.00	\$46,214.92	\$44,187.50
2	51,005.00	*50,000.00	47,139.22	44,629.38
3	51,515.05	*50,000.00	48,082.00	45,075.67
4	52,030.20	*50,000.00	49,043.64	45,526.43
5	52,550.50	50,185.73	50,024.51	45,981.69
6	53,076.01	51,165.27	51,025.00	46,441.51
7	53,606.77	53,606.77	52,045.51	46,905.92
8	54,142.84	54,142.84	53,086.42	47,374.98
9	54,684.26	54,684.26	54,148.14	47,848.73
10	55,231.11	55,231.11	55,231.11	48,327.22

<sup>\*</sup> Cash Surrender Value must be greater than or equal to the initial premium payment since no partial withdrawals have been made.

The tabular cash surrender value of the policy is always greater than the greater of the minimum cash surrender value and the minimum nonforfeiture value of the policy.

## Calculation of Minimum Paid Up Annuity Values

$$\begin{array}{lll} AD &= \$55,\!231.11 & (from\ Accumulation\ Value\ above) \\ F_{65} &= 4.08 & (from\ table\ in\ Payment\ of\ Policy\ Proceeds\ section\ of\ Policy; \\ & age\ adjustment = -1) \end{array}$$

$$B_{65} = (55,231.11)(4.08)(.001) = $225.34$$

All calculations for durations, ages, and sex other than those shown for the specimen calculations are determined in a manner consistent with the specimen calculations.

## IX. Reserves

The reserves held for this product are determined in accordance with the Standard Valuation Law. Statutory minimum standards will be met at all times for all values within the variable range. The methods and assumptions as specified by the Commissioners Annuity Reserve Valuation Method (CARVM) and the most recent NAIC interpretation of CARVM, Actuarial Guidelines XXXIII and XXXIV, are used to calculate reserves.

As required under Guideline XXXIV integrated benefit stream approach, any potential benefit stream is considered, including blends reflecting the interaction of more than one type of benefit. Such potential benefit streams include all types of benefits for which the greatest present value concept is required. In particular, we consider all elective benefits such as surrender, partial withdrawal and annuitization, as well as all non-elective benefits such as death, living benefits and unemployment.

#### **Valuation Interest**

The interest rate used in determining the minimum standard for valuation of this product shall be the calendar year statutory valuation interest as required by Actuarial Guideline XXXIII. Specifically the interest rate will be determined using the following "contract level" parameters:

- Issue year valuation basis
- With cash settlement option
- With no interest guarantees on considerations received more than one year after issue

The Guarantee Duration and Plan Type will be determined at the benefit level as required by Actuarial Guideline XXXIII.

The interest rate used in the valuation of surrender benefits for a 2007 year of issue for this form would be 4.75%. This corresponds to the rate for an Annuity with Guarantee Duration of 5 years or less – Plan Type C.

The interest rate used for Mortality and Morbidity for a 2007 year of issue for this form would be 5.50%. This corresponds to the rate for an Annuity with Guarantee Duration of 5 years or less – Plan Type A.

## **Valuation Mortality**

The valuation mortality basis for these forms shall conform to the Standard Valuation Law for these benefits. As of December 31, 2007 the mortality basis is the Annuity 2000 Table.

George E. Silos, FSA, MAAA

Hay E. Silos

# **Single Premium Deferred Annuity**

**Form Number 205-190** 

## **Purpose and Scope**

This actuarial memorandum demonstrates compliance with the Standard Nonforfeiture Law for Individual Deferred Annuities (SNFL). The memorandum also illustrates the calculations used to determine benefits for this policy and describes the reserve methodology.

This memorandum is broken into the following sections:

- Brief description of the product
- Variables used in formulas in this memorandum
- Additional definitions
- Description of nonforfeiture interest rate methodology
- Description of Guaranteed Minimum Interest Rate (GMIR) methodology
- Description of Cash Surrender Value calculation
- Description of the minimum monthly annuity payments calculation
- Specimen calculation
- Description of reserves

# **I. Product Description**

This policy is a single premium deferred annuity intended to accumulate funds until monthly income payments begin on the Annuity Commencement date. Accumulation values for this policy will be calculated based on New York Life Insurance and Annuity Corporation's declared interest rates. The declared guaranteed interest rate will never be less than the applicable rate in the state in which policy is issued, as specified on the policy data page. Mortality rates, where applicable, are based on the 1983 Individual Annuity Mortality Table A with Projection Scale G.

## II. Variables

P	= Gross Premium
X	= Issue Age
Z	= Age, as defined in the policy, at the annuity commencement date
T	= Number of years to maturity
	= The greater of a and b where
	a = (70-x)
	b = 10
t	= Policy Year
G	= years in the Guaranteed Period
$\mathbf{i}_{t}$	= Minimum nonforfeiture interest rate for policy year t (in decimal form)
$_{ m G}{f i}_{ m t}$	= declared interest rate for the Guaranteed Period of G years
$PWt_d$	= Partial Withdrawal made during policy year t at withdrawal day d
$SURt_d$	= Surrender charge, if any, applied to partial withdrawal made during policy
	year t and withdrawal day d
$SCP_t$	= Surrender Charges for policy year t
	7.00% for t<5
	6.00 t=5
	5.00 t=6
	4.00 t=7
	0.00 t>7

 $AV_t$  = Accumulation Value at the end of policy year t  $ABV_t$  = Accumulation Value at the beginning of policy year t

 $=AV_{t-1}-PWy_1-SURy_1$ 

 $CSV_t$  = Cash Surrender Value at time t

MV = Accumulation Value projected to the maturity age using the declared rate for the remainder of the Guaranteed Period and the guaranteed minimum declared interest

rate thereafter

AD = Accumulation Value less any state premium tax payable on the

annuity commencement date

F<sub>z</sub> = Minimum monthly income factor per \$1,000 of proceeds at age z for equal lifetime payments, guaranteed to be paid for ten years, as stated

in the Life Income Guaranteed Period Payment Option Table of the policy

 $B_z$  = Amount of minimum monthly annuity payments beginning at age z

#### III. Definitions

Accumulation Value: The Accumulation Value equals the accumulation, at interest, of the Gross Premium

less amounts withdrawn.

Cash Surrender Value: The Cash Surrender Value is equal to the greatest of:

1) the Accumulation Value minus the Surrender Charge;

2) the minimum Cash Surrender Value as outlined in Section 6 of the SNFL;

3) the Minimum Nonforfeiture Value (MNFV) as outlined in Section 4 of the SNFL; and

4) the Gross Premium, reduced by any previous partial withdrawals.

Guaranteed Period: The initial period or a subsequent period for which the company has declared an interest

rate. The available Guaranteed Periods are: 1) one year, 2) two years, 3) three years, and 5) five years. The Guaranteed Periods subsequent to the initial period are one year in duration. The declared rate for any Guaranteed Period will never be less than the

guaranteed minimum interest rate (GMIR).

Minimum Nonforfeiture Value: The SNFL prescribes that the net premium for a given contract year used to

define the MNFV equals the accumulation, at the minimum nonforfeiture interest rate, of 87.5% of the Gross Premium less amounts withdrawn.

# IV. Minimum Nonforfeiture Interest Rate Methodology

I certify that this fixed annuity contract form is in compliance with the nonforfeiture requirements of the SNFL.

The methodology for determining the minimum nonforfeiture interest rate (i<sub>t</sub>) will be as follows:

- The minimum nonforfeiture interest rate will be determined twice a year in June and December for periods beginning July 1 and January 1, respectively;
- The minimum nonforfeiture interest rate is the lesser of three percent and the rate determined based on a six-month average of the five-year Constant Maturity Treasury Rate for December through May (for period beginning July 1) and June through November (for period beginning January 1);
- The six-month average CMT rate, rounded to the nearest 1/20th of one percent, will be reduced by 125 basis points, where the resulting interest rate is not less than one percent; and
- The minimum nonforfeiture interest rate is locked in for the life of the policy based on the rate in effect when the policy was issued.

Sample Calculation of Nonforfeiture Interest Rate (3.00% as of January 2008)

Month	Average Monthly 5 year CMT
June 2007	5.03%
July 2007	4.88%
August 2007	4.43%
September 2007	4.20%
October 2007	4.20%
November 2007	3.67%

Average Monthly 5 year CMT over a six month period (rounded to nearest 5bp) = 4.40% Reduced by 125 basis points = 3.15% Maximum of 3.00% = 3.00%

# V. GMIR Methodology

The guaranteed minimum interest rate (GMIR) is the minimum declared interest rate. The GMIR is guaranteed for the life of a policy based on the rate declared on the date of policy issue. The GMIR will be equal to or greater than the nonforfeiture interest rate.

# VI. Calculation of Policy Cash Surrender Value at end of Policy Year t

A. Calculation of the Accumulation Value at the end of Policy Year t

For 
$$t = 0$$
  $AV_t = P$   $365$  Otherwise  $AV_t = (AV_{t-1}) (1 + {}_{G}i_t) - \sum_{d-1} (PWt_d + SURt_d) (1 + {}_{G}i_t)^{(365-d)/365}$ 

B. Calculation of the tabular Cash Surrender Value (Accumulation Values less Surrender Charges) at the end of policy year t on or before the annuity commencement date

$$tCSV_t = (AV_t - max(.10 \text{ x } ABV_t, .10 \text{ x } AV_t)) (1 - SCP_t) + max(.10 \text{ x } ABV_t, .10 \text{ x } AV_t)$$

if no partial withdrawals have been made during the policy year

$$=$$
 AV<sub>t</sub> (1 - SCP<sub>t</sub>)

if partial withdrawals equal to  $max(.10 \ x \ ABV_t, .10 \ x \ AV_t)$  have been made during the policy year

If P is at least \$100,000 then

$$tCSV_t = (AV_t - max(.10 \text{ x } ABV_t, .10 \text{ x } AV_t, ABV_t - P, AV_t - P)) (1 - SCP_t) + max(.10 \text{ x } ABV_t, .10 \text{ x } AV_t, ABV_t - P, AV_t - P)$$

The Actual Cash Surrender Value of the Contract will not be less than the initial premium payment less any previous partial withdrawals and surrender charges paid on those withdrawals.

C. Calculation of minimum Cash Surrender Value at the end of policy year t

$$\begin{aligned} For \ t &= T \\ t &< T \end{aligned} \qquad \begin{aligned} mCSV_T &= MV \\ mCSV_{t-1} &= MCSV_t \ x \ 1/(1+i_t+.01) \end{aligned}$$

D. Calculation of Minimum Nonforfeiture Value (MNFV) at the end of policy year t

$$\begin{array}{ll} For \; t = 0 & MNFV_0 = 0 \\ For \; t = 1 & MNFV_t = (MNFV_{t-1} + (P \; x \; .875)) \; x \; (1 + i_t) \\ For \; t > 1 & MNFV_t = (MNFV_{t-1} + 0) \; x \; (1 + i_t) \end{array}$$

E. Calculation of policy Cash Surrender Value at the end of policy year t

$$pCSVt = max(tCSV_t, mCSV_t, MNFV_t)$$

F. Calculation of the policy Cash Surrender Value at times other than the end of policy year t on or before the annuity commencement date

The calculation of the policy Cash Surrender Value at times other than the end of policy year t on or before the Annuity Commencement Date is exactly the same as the calculation of the policy Cash Surrender Value at the end of policy year t on or before the Annuity Commencement Date except that all interest accumulations are made to the date of the calculation instead of to the end of policy year.

# VII. Calculation of Minimum Monthly Annuity Payments

$$B_z = (AD) (F_z) (.001)$$

## **VIII. Specimen Calculations**

Calculation of Policy Cash Surrender Value at end of Policy Year y, where Minimum Nonforfeiture Interest Rate is related to the 5 year Constant Maturity Treasury Rate less 125 basis points

Assume:

Non-qualified policy Gross Premium: \$50,000 Policy issued to a male age 35

Guaranteed Minimum Interest Rate: 1.0% Minimum Nonforfeiture Interest Rate: 1.0% Annuity Commencement Date: Age 65

No partial surrenders

Year of	Accumulation	Cash	Minimum Cash	Minimum Non-
Surrender	Value	Surrender Value	Surrender Value	Forfeiture Value
1	\$50,500.00	*\$50,000.00	\$37,949.52	\$44,187.50
2	51,005.00	*50,000.00	38,708.51	44,629.38
3	51,515.05	*50,000.00	39,482.68	45,075.67
4	52,030.20	*50,000.00	40,272.33	45,526.43
5	52,550.50	*50,000.00	41,077.78	45,981.69
6	53,076.01	50,687.59	41,899.33	46,441.51
7	53,606.77	51,676.92	42,737.32	46,905.92
8	54,142.84	54,142.84	43,592.06	47,374.98
9	54,684.26	54,684.26	44,463.91	47,848.73
10	55,231.11	55,231.11	45,353.18	48,327.22
15	58,048.45	58,048.45	50,073.58	50,792.39
20	61,009.50	61,009.50	55,285.28	53,383.31
25	64,121.60	64,121.60	61,039.41	56,106.40
30	67,392.45	67,392.45	67,392.45	58,968.39

<sup>\*</sup> Cash Surrender Value must be greater than or equal to the initial premium payment since no partial withdrawals have been made.

The tabular cash surrender value of the policy is always greater than the greater of the minimum cash surrender value and the minimum nonforfeiture value of the policy.

# Calculation of Minimum Paid Up Annuity Values

$$\begin{array}{lll} AD &=\$67,392.45 & \text{ (from Accumulation Value above)} \\ F_{65} &=& 4.08 & \text{ (from table in Payment of Policy Proceeds section of Policy;} \\ &=& age\ adjustment = -1) \end{array}$$

$$B_{65} = (67,392.45)(4.08)(.001) = $274.96$$

All calculations for durations, ages, and sex other than those shown for the specimen calculations are determined in a manner consistent with the specimen calculations.

# IX. Reserves

The reserves held for this product are determined in accordance with the Standard Valuation Law. Statutory minimum standards will be met at all times for all values within the variable range. The methods and assumptions as specified by the Commissioners Annuity Reserve Valuation Method (CARVM) and the most recent NAIC interpretation of CARVM, Actuarial Guidelines XXXIII and XXXIV, are used to calculate reserves.

As required under Guideline XXXIV integrated benefit stream approach, any potential benefit stream is considered, including blends reflecting the interaction of more than one type of benefit. Such potential benefit streams include all types of benefits for which the greatest present value concept is required. In particular, we consider all elective benefits such as surrender, partial withdrawal and annuitization, as well as all non-elective benefits such as death, living benefits and unemployment.

#### **Valuation Interest**

The interest rate used in determining the minimum standard for valuation of this product shall be the calendar year statutory valuation interest as required by Actuarial Guideline XXXIII. Specifically the interest rate will be determined using the following "contract level" parameters:

- Issue year valuation basis
- With cash settlement option
- With no interest guarantees on considerations received more than one year after issue

The Guarantee Duration and Plan Type will be determined at the benefit level as required by Actuarial Guideline XXXIII.

The interest rate used in the valuation of surrender benefits for a 2007 year of issue for this form would be 4.75%. This corresponds to the rate for an Annuity with Guarantee Duration of 5 years or less – Plan Type C.

The interest rate used for Mortality and Morbidity for a 2007 year of issue for this form would be 5.50%. This corresponds to the rate for an Annuity with Guarantee Duration of 5 years or less – Plan Type A.

# **Valuation Mortality**

The valuation mortality basis for these forms shall conform to the Standard Valuation Law for these benefits. As of December 31, 2007 the mortality basis is the Annuity 2000 Table.

George E. Silos, FSA, MAAA

Hay E. Silos

# **Single Premium Deferred Annuity**

**Form Number 205-191** 

## **Purpose and Scope**

This actuarial memorandum demonstrates compliance with the Standard Nonforfeiture Law for Individual Deferred Annuities (SNFL). The memorandum also illustrates the calculations used to determine benefits for this policy and describes the reserve methodology.

This memorandum is broken into the following sections:

- Brief description of the product
- Variables used in formulas in this memorandum
- Additional definitions
- Description of nonforfeiture interest rate methodology
- Description of Guaranteed Minimum Interest Rate (GMIR) methodology
- Description of Cash Surrender Value calculation
- Description of the minimum monthly annuity payments calculation
- Specimen calculation
- Description of reserves

# **I. Product Description**

This policy is a single premium deferred annuity intended to accumulate funds until monthly income payments begin on the Annuity Commencement date. Accumulation values for this policy will be calculated based on New York Life Insurance and Annuity Corporation's declared interest rates. The declared guaranteed interest rate will never be less than the applicable rate in the state in which policy is issued, as specified on the policy data page. Mortality rates, where applicable, are based on the 1983 Individual Annuity Mortality Table A with Projection Scale G.

## II. Variables

P	= Gross Premium
X	= Issue Age
Z	= Age, as defined in the policy, at the annuity commencement date
T	= Number of years to maturity
	= The greater of a and b where
	a = (70-x)
	b = 10
t	= Policy Year
G	= years in the Guaranteed Period
$\mathbf{i}_{t}$	= Minimum nonforfeiture interest rate for policy year t (in decimal form)
$_{ m G}{f i}_{ m t}$	= declared interest rate for the Guaranteed Period of G years
$PWt_d$	= Partial Withdrawal made during policy year t at withdrawal day d
$SURt_d$	= Surrender charge, if any, applied to partial withdrawal made during policy
	year t and withdrawal day d
$SCP_t$	= Surrender Charges for policy year t
	7.00% for t<5
	6.00 t=5
	5.00 t=6
	4.00 t=7
	0.00 t>7

 $AV_t$  = Accumulation Value at the end of policy year t  $ABV_t$  = Accumulation Value at the beginning of policy year t

 $=AV_{t-1}-PWy_1-SURy_1$ 

 $CSV_t$  = Cash Surrender Value at time t

MV = Accumulation Value projected to the maturity age using the declared rate for the remainder of the Guaranteed Period and the guaranteed minimum declared interest

rate thereafter

AD = Accumulation Value less any state premium tax payable on the

annuity commencement date

F<sub>z</sub> = Minimum monthly income factor per \$1,000 of proceeds at age z for equal lifetime payments, guaranteed to be paid for ten years, as stated

in the Life Income Guaranteed Period Payment Option Table of the policy

 $B_z$  = Amount of minimum monthly annuity payments beginning at age z

#### III. Definitions

Accumulation Value: The Accumulation Value equals the accumulation, at interest, of the Gross Premium

less amounts withdrawn.

Cash Surrender Value: The Cash Surrender Value is equal to the greatest of:

1) the Accumulation Value minus the Surrender Charge;

2) the minimum Cash Surrender Value as outlined in Section 6 of the SNFL;

3) the Minimum Nonforfeiture Value (MNFV) as outlined in Section 4 of the SNFL; and

4) the Gross Premium, reduced by any previous partial withdrawals.

Guaranteed Period: The initial period or a subsequent period for which the company has declared an interest

rate. The available Guaranteed Periods are: 1) one year, 2) two years, 3) three years, and 5) five years. The Guaranteed Periods subsequent to the initial period are one year in duration. The declared rate for any Guaranteed Period will never be less than the

guaranteed minimum interest rate (GMIR).

Minimum Nonforfeiture Value: The SNFL prescribes that the net premium for a given contract year used to

define the MNFV equals the accumulation, at the minimum nonforfeiture interest rate, of 87.5% of the Gross Premium less amounts withdrawn.

# IV. Minimum Nonforfeiture Interest Rate Methodology

I certify that this fixed annuity contract form is in compliance with the nonforfeiture requirements of the SNFL.

The methodology for determining the minimum nonforfeiture interest rate (i<sub>t</sub>) will be as follows:

- The minimum nonforfeiture interest rate will be determined twice a year in June and December for periods beginning July 1 and January 1, respectively;
- The minimum nonforfeiture interest rate is the lesser of three percent and the rate determined based on a six-month average of the five-year Constant Maturity Treasury Rate for December through May (for period beginning July 1) and June through November (for period beginning January 1);
- The six-month average CMT rate, rounded to the nearest 1/20th of one percent, will be reduced by 125 basis points, where the resulting interest rate is not less than one percent; and
- The minimum nonforfeiture interest rate is locked in for the life of the policy based on the rate in effect when the policy was issued.

Sample Calculation of Nonforfeiture Interest Rate (3.00% as of January 2008)

Month	Average Monthly 5 year CMT
June 2007	5.03%
July 2007	4.88%
August 2007	4.43%
September 2007	4.20%
October 2007	4.20%
November 2007	3.67%

Average Monthly 5 year CMT over a six month period (rounded to nearest 5bp) = 4.40% Reduced by 125 basis points = 3.15% Maximum of 3.00% = 3.00%

# V. GMIR Methodology

The guaranteed minimum interest rate (GMIR) is the minimum declared interest rate. The GMIR is guaranteed for the life of a policy based on the rate declared on the date of policy issue. The GMIR will be equal to or greater than the nonforfeiture interest rate.

# VI. Calculation of Policy Cash Surrender Value at end of Policy Year t

A. Calculation of the Accumulation Value at the end of Policy Year t

For 
$$t = 0$$
  $AV_t = P$   $365$  Otherwise  $AV_t = (AV_{t-1}) (1 + {}_{G}i_t) - \sum_{d-1} (PWt_d + SURt_d) (1 + {}_{G}i_t)^{(365-d)/365}$ 

B. Calculation of the tabular Cash Surrender Value (Accumulation Values less Surrender Charges) at the end of policy year t on or before the annuity commencement date

$$tCSV_t = (AV_t - max(.10 \text{ x } ABV_t, .10 \text{ x } AV_t)) (1 - SCP_t) + max(.10 \text{ x } ABV_t, .10 \text{ x } AV_t)$$

if no partial withdrawals have been made during the policy year

$$=$$
 AV<sub>t</sub> (1 - SCP<sub>t</sub>)

if partial withdrawals equal to  $max(.10 \ x \ ABV_t, .10 \ x \ AV_t)$  have been made during the policy year

If P is at least \$100,000 then

$$tCSV_t = (AV_t - max(.10 \text{ x } ABV_t, .10 \text{ x } AV_t, ABV_t - P, AV_t - P)) (1 - SCP_t) + max(.10 \text{ x } ABV_t, .10 \text{ x } AV_t, ABV_t - P, AV_t - P)$$

The Actual Cash Surrender Value of the Contract will not be less than the initial premium payment less any previous partial withdrawals and surrender charges paid on those withdrawals.

C. Calculation of minimum Cash Surrender Value at the end of policy year t

$$\begin{aligned} For \ t &= T \\ t &< T \end{aligned} \qquad \begin{aligned} mCSV_T &= MV \\ mCSV_{t-1} &= MCSV_t \ x \ 1/(1+i_t+.01) \end{aligned}$$

D. Calculation of Minimum Nonforfeiture Value (MNFV) at the end of policy year t

$$\begin{array}{ll} For \; t = 0 & MNFV_0 = 0 \\ For \; t = 1 & MNFV_t = (MNFV_{t-1} + (P \; x \; .875)) \; x \; (1 + i_t) \\ For \; t > 1 & MNFV_t = (MNFV_{t-1} + 0) \; x \; (1 + i_t) \end{array}$$

E. Calculation of policy Cash Surrender Value at the end of policy year t

$$pCSVt = max(tCSV_t, mCSV_t, MNFV_t)$$

F. Calculation of the policy Cash Surrender Value at times other than the end of policy year t on or before the annuity commencement date

The calculation of the policy Cash Surrender Value at times other than the end of policy year t on or before the Annuity Commencement Date is exactly the same as the calculation of the policy Cash Surrender Value at the end of policy year t on or before the Annuity Commencement Date except that all interest accumulations are made to the date of the calculation instead of to the end of policy year.

# VII. Calculation of Minimum Monthly Annuity Payments

$$B_z = (AD) (F_z) (.001)$$

## **VIII. Specimen Calculations**

Calculation of Policy Cash Surrender Value at end of Policy Year y, where Minimum Nonforfeiture Interest Rate is related to the 5 year Constant Maturity Treasury Rate less 125 basis points

Assume:

Non-qualified policy Gross Premium: \$50,000 Policy issued to a male age 35

Guaranteed Minimum Interest Rate: 1.0% Minimum Nonforfeiture Interest Rate: 1.0% Annuity Commencement Date: Age 65

No partial surrenders

Year of	Accumulation	Cash	Minimum Cash	Minimum Non-
Surrender	Value	Surrender Value	Surrender Value	Forfeiture Value
1	\$50,500.00	*\$50,000.00	\$37,949.52	\$44,187.50
2	51,005.00	*50,000.00	38,708.51	44,629.38
3	51,515.05	*50,000.00	39,482.68	45,075.67
4	52,030.20	*50,000.00	40,272.33	45,526.43
5	52,550.50	*50,000.00	41,077.78	45,981.69
6	53,076.01	50,687.59	41,899.33	46,441.51
7	53,606.77	51,676.92	42,737.32	46,905.92
8	54,142.84	54,142.84	43,592.06	47,374.98
9	54,684.26	54,684.26	44,463.91	47,848.73
10	55,231.11	55,231.11	45,353.18	48,327.22
15	58,048.45	58,048.45	50,073.58	50,792.39
20	61,009.50	61,009.50	55,285.28	53,383.31
25	64,121.60	64,121.60	61,039.41	56,106.40
30	67,392.45	67,392.45	67,392.45	58,968.39

<sup>\*</sup> Cash Surrender Value must be greater than or equal to the initial premium payment since no partial withdrawals have been made.

The tabular cash surrender value of the policy is always greater than the greater of the minimum cash surrender value and the minimum nonforfeiture value of the policy.

# Calculation of Minimum Paid Up Annuity Values

$$\begin{array}{lll} AD &=\$67,392.45 & \text{ (from Accumulation Value above)} \\ F_{65} &=& 4.08 & \text{ (from table in Payment of Policy Proceeds section of Policy;} \\ &=& age \ adjustment = -1) \end{array}$$

$$B_{65} = (67,392.45)(4.08)(.001) = $274.96$$

All calculations for durations, ages, and sex other than those shown for the specimen calculations are determined in a manner consistent with the specimen calculations.

# IX. Reserves

The reserves held for this product are determined in accordance with the Standard Valuation Law. Statutory minimum standards will be met at all times for all values within the variable range. The methods and assumptions as specified by the Commissioners Annuity Reserve Valuation Method (CARVM) and the most recent NAIC interpretation of CARVM, Actuarial Guidelines XXXIII and XXXIV, are used to calculate reserves.

As required under Guideline XXXIV integrated benefit stream approach, any potential benefit stream is considered, including blends reflecting the interaction of more than one type of benefit. Such potential benefit streams include all types of benefits for which the greatest present value concept is required. In particular, we consider all elective benefits such as surrender, partial withdrawal and annuitization, as well as all non-elective benefits such as death, living benefits and unemployment.

#### **Valuation Interest**

The interest rate used in determining the minimum standard for valuation of this product shall be the calendar year statutory valuation interest as required by Actuarial Guideline XXXIII. Specifically the interest rate will be determined using the following "contract level" parameters:

- Issue year valuation basis
- With cash settlement option
- With no interest guarantees on considerations received more than one year after issue

The Guarantee Duration and Plan Type will be determined at the benefit level as required by Actuarial Guideline XXXIII.

The interest rate used in the valuation of surrender benefits for a 2007 year of issue for this form would be 4.75%. This corresponds to the rate for an Annuity with Guarantee Duration of 5 years or less – Plan Type C.

The interest rate used for Mortality and Morbidity for a 2007 year of issue for this form would be 5.50%. This corresponds to the rate for an Annuity with Guarantee Duration of 5 years or less – Plan Type A.

# **Valuation Mortality**

The valuation mortality basis for these forms shall conform to the Standard Valuation Law for these benefits. As of December 31, 2007 the mortality basis is the Annuity 2000 Table.

George E. Silos, FSA, MAAA

Hay E. Silos

Home Office [200 Continental Drive Suite 306] [Newark, DE 19713] Executive Office [51 Madison Avenue] [New York, NY 10010]

#### **POLICY DATA PAGE**

Annuitant -- [John Doe] AGE: [35] [MALE]

Policy Number -- [00 000 000]
Policy Date -- [January 1, 2008]
Owner -- [The Annuitant]
Plan -- [Non-Qualified]

Premium Payment: \$[5,000.00]

Initial Interest Rate Guarantee Period Ending On: [December 31, 2008]

**ANNUITY COMMENCEMENT DATE**: [January 1, 2063]

## SURRENDER CHARGE SCHEDULE:

POLICY YEAR	PERCENTAGE	POLICY YEAR	PERCENTAGE
1	7%	5	5%
2	7%	6	4%
3	7%	7	0%
4	6%		
1	7%	5	5%
2	7%	6	4%
3	7%	7	3%
4	6%	8	2%
		9	0%

Initial Interest Rate: [4.0%] (Effective annual yield)

Guaranteed Minimum Interest Rate: [2.0%] (Effective annual yield)

Minimum Partial Withdrawal Amount: \$100.00

Minimum Accumulation Value that must be maintained in the Policy after a Partial Withdrawal: \$2,000.00

**ENHANCED DEATH BENEFIT:** 

Maximum Enhanced Death Benefit Rate: 100% of Adjusted Premium Payment Guaranteed Enhanced Death Benefit Rate: 40% of Adjusted Accumulation Value

**ISSUE DATE**: [JANUARY 2, 2008]

**SPECIMEN COPY** 

207-198

# Statement of Variability For Individual Deferred Fixed Annuity Contract Form Number: 207-198

Any use of variability shall be administered in a uniform and non-discriminatory manner and shall not result in unfair discrimination. The following information, that is bracketed, is denoted as variable.

**Executive Office/Home Office Addresses**: For changes to this information should NYLIAC's office locations change.

**Officer Signatures**: For any change to the corporation's officers.

Customer Service Phone Number: For changes to the toll-free phone number.

**Marketing Name:** For changes to the marketing name.

**Plan**: For changes to the plan types made available by NYLIAC and in accordance with applicable law for tax qualified plans available with this product. If the available choices for the Plan Type change, we will submit a limited informational filling. The available plans are Non-Qualified, IRA, SEP IRA, Roth IRA, Inherited IRA, SIMPLE IRA, TSA, Pension & Keogh, 412(e)(3) and 457b.

**Premium Payment**: The premium amount used to purchase the policy. The minimum premium payment is \$10,000 for Pension and Keogh Plans; \$5,000 for all other plans. Premium payments of \$1,000,000 to \$5,000,000 are subject to prior approval by NYLIAC.

**Initial Interest Rate Guarantee Period Ending On:** The ending date for the period during which the declared interest rate is guaranteed not to change. This date is based on the interest rate guarantee period elected by the applicant. The four initial interest rate guarantee periods currently offered for this product are: One- Year, Two-Year, Three-Year and Six-Year. If these available choices change, we will submit a limited informational filing.

**Surrender Charge Schedule:** The schedule elected on the application based on a choice of two surrender charge schedules, a six-year or an eight-year. If the available choices change, we will submit a limited refiling of the data page accompanied with updated supporting actuarial material and a revised Statement of Variability.

**Initial Interest Rate:** The declared interest rate for the initial interest rate guarantee period. Initial Guaranteed Interest Rates are determined by weighing several important factors. The most important among these are 1) interest rates available to NYLIAC on suitable investments, 2) the interest rates offered by our competitors-primarily companies who have received ratings from the independent rating agencies similar to those received by our company, and 3) profitability. These rates are set twice a month and apply to new issues only.

**Guaranteed Minimum Interest Rate:** The Guaranteed Minimum Interest Rate(s) will always be equal to or greater than the Non-Forfeiture rate. The range for this rate is between and including 1% and 5%. Any change will be applicable only to new issues.

# **Guaranteed Minimum Interest Rate equal to the Non-Forfeiture Rate**

The methodology for determining the Guaranteed Minimum Interest Rate when it is equal to the Non-Forfeiture rate will be as follows:

- Guaranteed Minimum Interest Rate (GMIR) will be set twice a year in June and December for periods beginning July 1 and January 1;
- This GMIR will then be determined in accordance with the Standard Non-Forfeiture Law for Individual Deferred Annuities.
- The interest rate will be determined based on a six-month average of the fiveyear Constant Maturity Treasury Rate for December through May (for period beginning July 1) and June through November (for period beginning January 1) rounded to the nearest 1/20th of one percent. This rate is then reduced by one and one fourth percent (1.25%).

Guaranteed Minimum Interest Rate greater than the Non-Forfeiture Rate
Guaranteed Minimum Interest Rates (GMIRs) greater than the Non-Forfeiture rate will
be determined by weighing several important factors. The most important among these
are:

- The interest rates in effect at the time of contract issue as well as forecasted interest rates.
- The GMIRs and interest rates offered by our competitors primarily companies that have received ratings from the independent rating agencies similar to those received by our company, and
- Profitability.

**Enhanced Death Benefit:** This rider information will display only when elected by the applicant.

All other bracketed items are John Doe information.

Home Office [Newark, Delaware] Executive Office [51 Madison Avenue] [New York, NY 10010]

#### **POLICY DATA PAGE**

Annuitant -- [John Doe] AGE: [35] [MALE]

Policy Number -- [00 000 000]
Policy Date -- [January 1, 2008]
Owner -- [The Annuitant]
Plan -- [Non-Qualified]

Purchase Premium: [\$5,000.00] Minimum Purchase Premium for this Policy: [\$5,000.00]

Initial Interest Rate Guarantee Period Ending On: [December 31, 2008]

**ANNUITY COMMENCEMENT DATE**: [January 1, 2063]

## **SURRENDER CHARGE SCHEDULE:**

POLICY YEAR	PERCENTAGE	POLICY YEAR	PERCENTAGE
1	7%	6	5%
2	7%	7	4%
3	7%	8	0%
4	7%		
5	6%		

Minimum Guaranteed Interest Rate: [2.0%] (Effective annual yield)

Minimum Partial Withdrawal Amount: \$100.00

Minimum Accumulation Value that must be maintained in the Policy after a Partial Withdrawal: \$2,000.00

# **ENHANCED DEATH BENEFIT:**

Maximum Enhanced Death Benefit Rate: 100% of Adjusted Premium Payment Guaranteed Enhanced Death Benefit Rate: 40% of Adjusted Accumulation Value

**ISSUE DATE:** [JANUARY 2, 2008]

# **SPECIMEN COPY**

205-190 2

# Statement of Variability For Individual Deferred Fixed Annuity Contract Form Number: 205-190

Any use of variability shall be administered in a uniform and non-discriminatory manner and shall not result in unfair discrimination. The following information, that is bracketed, is denoted as variable.

**Executive Office/Home Office Addresses**: For changes to this information should NYLIAC's office locations change.

**Plan**: For changes to the plan types made available by NYLIAC and in accordance with applicable law for tax qualified plans available with this product. If the available choices for the Plan Type change, we will submit a limited informational filling. The available plans are Non-Qualified, IRA, SEP IRA, Roth IRA, Inherited IRA, SIMPLE IRA, TSA, Pension & Keogh, and 457b.

Purchase Premium: The premium amount used to purchase the policy.

**Minimum Purchase Premium for this Policy**: The minimum premium is \$10,000 for Pension and Keogh Plans; \$5,000 for all other plans. Premium payments of \$1,000,000 to \$5,000,000 are subject to prior approval by NYLIAC.

**Initial Interest Rate Guarantee Period Ending On:** The ending date for the period during which the declared interest rate is guaranteed not to change. This date is based on the interest rate guarantee period elected by the applicant. The four initial interest rate guarantee periods currently offered for this product are: One –Year, Two-Year, Three-Year and Five-Year. If these available choices change, we will submit a limited informational filing.

**Minimum Guaranteed Interest Rate:** The Guaranteed Minimum Interest Rate(s) will always be equal to or greater than the Non-Forfeiture rate. The range for this rate is between and including 1% and 5%. Any change will be applicable only to new issues.

## **Guaranteed Minimum Interest Rate equal to the Non-Forfeiture Rate**

The methodology for determining the Guaranteed Minimum Interest Rate when it is equal to the Non-Forfeiture rate will be as follows:

- Guaranteed Minimum Interest Rate (GMIR) will be set twice a year in June and December for periods beginning July 1 and January 1;
- This GMIR will then be determined in accordance with the Standard Non-Forfeiture Law for Individual Deferred Annuities.
- The interest rate will be determined based on a six-month average of the five-year Constant Maturity Treasury Rate for December through May (for period beginning July 1) and June through November (for period beginning January 1) rounded to the nearest 1/20th of one percent. This rate is then reduced by one and one fourth percent (1.25%).

# **Guaranteed Minimum Interest Rate greater than the Non-Forfeiture Rate**

Guaranteed Minimum Interest Rates (GMIRs) greater than the Non-Forfeiture rate will be determined by weighing several important factors. The most important among these are

- The interest rates in effect at the time of contract issue as well as forecasted interest rates,
- The GMIRs and interest rates offered by our competitors primarily companies that have received ratings from the independent rating agencies similar to those received by our company, and
- Profitability.

**Enhanced Death Benefit:** This rider information will display only when elected by the applicant.

All other bracketed items are John Doe information.

# New York Life Insurance and Annuity Corporation [51 Madison Avenue - New York, NY 10010]

#### POLICY DATA PAGE

Annuitant -- [John Doe] AGE: [35] [ MALE]

Policy Number -- [00 000 000]
Policy Date -- [January 1, 2008]
Owner -- [The Annuitant]

**INITIAL PREMIUM:** 

Initial Premium Payment: [\$2,500.00]
Initial Premium Payment Date: [January 1, 2008]
Minimum Initial Premium Payment: [\$2,500.00]

**PLANNED ADDITIONAL PREMIUMS:** 

Premium Amount: [\$50.00 Monthly]
Minimum Additional Premium Payment: [\$50.00 Monthly]

Maximum Additional Premium Payments: [\$50,000.00 per policy year]

**ANNUITY COMMENCEMENT DATE**: [January 1, 2063]

**SURRENDER CHARGE SCHEDULE:** 

POLICY YEAR	PERCENTAGE	POLICY YEAR	PERCENTAGE
1	7%	6	4%
2	7%	7	3%
3	7%	8	2%
4	6%	9	1%
5	5%	10	0%

Minimum Guaranteed Interest Rate: [2.0%]

Minimum Withdrawal Amount: \$100.00

Minimum Balance that must be maintained in the Policy after a Partial Withdrawal: \$2,000.00

**POLICY SERVICE CHARGE**: After the first Policy Year, a Service Charge equal to the lesser of \$30 or 2% of the Accumulation Value may be deducted on the Policy Anniversary and on the date the policy is surrendered. However, if on the Policy Anniversary or on the date of surrender the Accumulation Value is \$10,000 or greater, this fee is waived.

**ISSUE DATE**: [January 2, 2008]

# **SPECIMEN COPY**

204-180 2

# Statement of Variability For Individual Deferred Fixed Annuity Contract Form Number: 204-180

Any use of variability shall be administered in a uniform and non-discriminatory manner and shall not result in unfair discrimination. The following information, that is bracketed, is denoted as variable.

Company Address: For changes to this information should NYLIAC's office location change.

#### Initial Premium and Planned Additional Premiums:

**Initial Premium Payment:** The premium amount used to purchase the policy.

Minimum Premium Amount: The minimum premium payment is based on plan type as follows:

Non tax-qualified \$2,500 plus \$50 per month or \$5,000 single amount

IRA \$165 per month or \$1,200 plus \$100 per month or \$2,000 single amount

SIMPLE IRA \$4000 single premium. Additional premiums \$50 per month

SEP \$50 per month or \$600 single amount TSA \$50 per month or \$2,000 single amount

Pension and Keogh \$10,000

# **Maximum Additional Premium Amount**

All plans \$50,000 per policy year

For all plans, the minimum additional premium payment is \$50 and the maximum additional premium payments, inclusive of planned premium amount, is \$50,000 per policy.

**Minimum Guaranteed Interest Rate:** The Guaranteed Minimum Interest Rate(s) will always be equal to or greater than the Non-Forfeiture rate. The range for this rate is between and including 1% and 5%. Any change will be applicable only to new issues.

# **Guaranteed Minimum Interest Rate equal to the Non-Forfeiture Rate**

The methodology for determining the Guaranteed Minimum Interest Rate when it is equal to the Non-Forfeiture rate will be as follows:

- Guaranteed Minimum Interest Rate (GMIR) will be set twice a year in June and December for periods beginning July 1 and January 1;
- This GMIR will then be determined in accordance with the Standard Non-Forfeiture Law for Individual Deferred Annuities.
- The interest rate will be determined based on a six-month average of the five-year Constant Maturity Treasury Rate for December through May (for period beginning July 1) and June through November (for period beginning January 1) rounded to the nearest 1/20th of one percent. This rate is then reduced by one and one fourth percent (1.25%).

# **Guaranteed Minimum Interest Rate greater than the Non-Forfeiture Rate**

Guaranteed Minimum Interest Rates (GMIRs) greater than the Non-Forfeiture rate will be determined by weighing several important factors. The most important among these are:

- The interest rates in effect at the time of contract issue as well as forecasted interest rates,
- The GMIRs and interest rates offered by our competitors primarily companies that have received ratings from the independent rating agencies similar to those received by our company, and
- Profitability.

All other bracketed items are John Doe information.

# New York Life Insurance and Annuity Corporation [51 Madison Avenue - New York, NY 10010]

#### POLICY DATA PAGE

Annuitant -- [John Doe] AGE: [35] [MALE]

Annuitant -- [John Doe]
Policy Number-- [00 000 000]
Policy Date -- [January 1, 2008]
Owner -- [The Annuitant]

Single Premium Payment: [\$5,000.00] Minimum Premium Payment for this Policy: [\$5,000.00]

Initial Interest Rate Guarantee Period Ending On: [December 31, 2008]

**ANNUITY COMMENCEMENT DATE**: [January 1, 2063]

# **SURRENDER CHARGE SCHEDULE:**

POLICY YEAR	PERCENTAGE	POLICY YEAR	PERCENTAGE
1	7%	5	5%
2	7%	6	4%
3	7%	7	0%
4	6%		

Minimum Guaranteed Interest Rate: [2.0]% (Effective annual yield)

Minimum Withdrawal Amount: \$100.00

Minimum Balance that must be maintained in the Policy after a Partial Withdrawal: \$2,000.00

**ISSUE DATE:** [JANUARY 2, 2008]

# **SPECIMEN COPY**

204-185

# Statement of Variability For Individual Deferred Fixed Annuity Contract Form Number: 204-185

Any use of variability shall be administered in a uniform and non-discriminatory manner and shall not result in unfair discrimination. The following information, that is bracketed, is denoted as variable.

**Company Address**: For changes to this information should NYLIAC's office location change.

Single Premium Payment: The premium amount used to purchase the policy.

**Minimum Premium Payment for this Policy**: The minimum premium payment is \$10,000 for Pension and Keogh Plans; \$5,000 for all other plans. Premium payments of \$1,000,000 to \$5,000,000 are subject to prior approval by NYLIAC.

**Initial Interest Rate Guarantee Period Ending On:** The ending date for the period during which the declared interest rate is guaranteed not to change. This date is based on the interest rate guarantee period elected by the applicant. The four initial interest rate guarantee periods currently offered for this product are: One-Year, Two-Year, Three-Year and Six-Year. If these available choices change, we will submit a limited informational filing.

**Minimum Guaranteed Interest Rate:** The Guaranteed Minimum Interest Rate(s) will always be equal to or greater than the Non-Forfeiture rate. The range for this rate is between and including 1% and 5%. Any change will be applicable only to new issues.

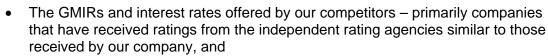
## **Guaranteed Minimum Interest Rate equal to the Non-Forfeiture Rate**

The methodology for determining the Guaranteed Minimum Interest Rate when it is equal to the Non-Forfeiture rate will be as follows:

- Guaranteed Minimum Interest Rate (GMIR) will be set twice a year in June and December for periods beginning July 1 and January 1;
- This GMIR will then be determined in accordance with the Standard Non-Forfeiture Law for Individual Deferred Annuities.
- The interest rate will be determined based on a six-month average of the fiveyear Constant Maturity Treasury Rate for December through May (for period beginning July 1) and June through November (for period beginning January 1) rounded to the nearest 1/20th of one percent. This rate is then reduced by one and one fourth percent (1.25%).

Guaranteed Minimum Interest Rate greater than the Non-Forfeiture Rate
Guaranteed Minimum Interest Rates (GMIRs) greater than the Non-Forfeiture rate will
be determined by weighing several important factors. The most important among these
are:

 The interest rates in effect at the time of contract issue as well as forecasted interest rates.



• Profitability.

All other bracketed items are John Doe information.

# **ENDORSEMENT**

# **Minimum Guaranteed Interest Rate**

This Endorsement is attached to and made a part of your policy.

Your minimum guaranteed interest rate is [2.0%].

# **NEW YORK LIFE INSURANCE AND ANNUITY CORPORATION**

President

Secretary

**SPECIMEN COPY** 

# Statement of Variability For Endorsement Form Number: 6408-03

Any use of variability shall be administered in a uniform and non-discriminatory manner and shall not result in unfair discrimination. The following information, that is bracketed, is denoted as variable.

**Officer Signatures**: For any change to the corporation's officers.

**Minimum Guaranteed Interest Rate:** The Guaranteed Minimum Interest Rate(s) will always be equal to or greater than the Non-Forfeiture rate. The range for this rate is between and including 1% and 5%. Any change will be applicable only to new issues.

#### **Guaranteed Minimum Interest Rate equal to the Non-Forfeiture Rate**

The methodology for determining the Guaranteed Minimum Interest Rate when it is equal to the Non-Forfeiture rate will be as follows:

- Guaranteed Minimum Interest Rate (GMIR) will be set twice a year in June and December for periods beginning July 1 and January 1;
- This GMIR will then be determined in accordance with the Standard Non-Forfeiture Law for Individual Deferred Annuities.
- The interest rate will be determined based on a six-month average of the fiveyear Constant Maturity Treasury Rate for December through May (for period beginning July 1) and June through November (for period beginning January 1) rounded to the nearest 1/20th of one percent. This rate is then reduced by one and one fourth percent (1.25%).

#### Guaranteed Minimum Interest Rate greater than the Non-Forfeiture Rate

Guaranteed Minimum Interest Rates (GMIRs) greater than the Non-Forfeiture rate will be determined by weighing several important factors. The most important among these are:

- The interest rates in effect at the time of contract issue as well as forecasted interest rates.
- The GMIRs and interest rates offered by our competitors primarily companies that have received ratings from the independent rating agencies similar to those received by our company, and
- Profitability.

# **DATA PAGE ENDORSEMENT**

# **Minimum Guaranteed Interest Rate**

This Endorsement is attached to and made a part of your policy.

Your minimum guaranteed interest rate is [2.0%].

# **NEW YORK LIFE INSURANCE AND ANNUITY CORPORATION**

President

Secretary

**SPECIMEN COPY** 

# Statement of Variability For Endorsement Form Number: 6408-05

Any use of variability shall be administered in a uniform and non-discriminatory manner and shall not result in unfair discrimination. The following information, that is bracketed, is denoted as variable.

**Officer Signatures**: For any change to the corporation's officers.

**Minimum Guaranteed Interest Rate:** The Guaranteed Minimum Interest Rate(s) will always be equal to or greater than the Non-Forfeiture rate. The range for this rate is between and including 1% and 5%. Any change will be applicable only to new issues.

#### **Guaranteed Minimum Interest Rate equal to the Non-Forfeiture Rate**

The methodology for determining the Guaranteed Minimum Interest Rate when it is equal to the Non-Forfeiture rate will be as follows:

- Guaranteed Minimum Interest Rate (GMIR) will be set twice a year in June and December for periods beginning July 1 and January 1;
- This GMIR will then be determined in accordance with the Standard Non-Forfeiture Law for Individual Deferred Annuities.
- The interest rate will be determined based on a six-month average of the fiveyear Constant Maturity Treasury Rate for December through May (for period beginning July 1) and June through November (for period beginning January 1) rounded to the nearest 1/20th of one percent. This rate is then reduced by one and one fourth percent (1.25%).

#### Guaranteed Minimum Interest Rate greater than the Non-Forfeiture Rate

Guaranteed Minimum Interest Rates (GMIRs) greater than the Non-Forfeiture rate will be determined by weighing several important factors. The most important among these are:

- The interest rates in effect at the time of contract issue as well as forecasted interest rates.
- The GMIRs and interest rates offered by our competitors primarily companies that have received ratings from the independent rating agencies similar to those received by our company, and
- Profitability.



# NEW YORK LIFE INSURANCE COMPANY NEW YORK LIFE INSURANCE AND ANNUITY CORPORATION

(A Delaware Corporation)

1 Rockwood Road, Sleepy Hollow, NY 10591 "The Company You Keep"®

Suzanne Wolf

Assistant Vice President - Product Development

Bus: (914) 846-3508 Fax: (914) 846-4487 Toll Free: (800) 280-3551

E-Mail: Suzanne\_M\_Wolf@newyorklife.com

May 16, 2008

Hon. Julie Benafield Bowman Commissioner Department of Insurance 1200 W. Third Street Little Rock, AR 72201-1904

Attn.: Policy & Other Form Filings

# RE: NEW YORK LIFE INSURANCE AND ANNUITY CORPORATION

N.A.I.C. NO.: 826-91596 F.E.I.N.: 13-3044743

# **Informational Filing of GMIR Change**

Form No.: 207-198	Individual Deferred Fixed Annuity	Contract
205-190	Individual Deferred Fixed Annuity	Contract
205-191AR	Individual Deferred Fixed Annuity	Contract
204-180	Individual Deferred Fixed Annuity	Contract
204-185	Individual Deferred Fixed Annuity	Contract
204-186.50	Individual Deferred Fixed Annuity	Contract

## Dear Hon. Julie Benafield Bowman:

The above listed forms were previously approved by your Department as follows: Policy Form 207-198 was approved on 7/10/2007; Policy Forms 205-190, and 205-191AR were approved on 3/16/2005; and Policy Form 204-180, 204-185 and 204-186.50 were approved on 7/1/2003.

Under these previously approved forms, we credit a Guaranteed Minimum Interest Rate (GMIR) as determined by an index, subject to your state's non-forfeiture law. However, in order to have the ability to be more responsive to the changing interest rate environment, and have the flexibility to credit a rate higher than the non-forfeiture rate, we are informing you of our intent to change the GMIR in response to market conditions. We intend to implement the initial change, using a 2.0% GMIR, on or about July 1, 2008 for new issues of the above-referenced

policies. Future changes would be implemented generally every six months. Other than changing the GMIR, no other changes are being made to these forms.

The enclosed Actuarial Memorandum includes a demonstration using a 1% GMIR (the non-forfeiture floor), but the rate we credit will always be equal to or greater than the rate required by your state's non-forfeiture law. The range for this rate is between and including 1% and 5%. We reserve the right to change the GMIR, and such change would be applied in a non-discriminatory manner. However, any change that is not within the stated range will not be made unless an informational filing has been made to your Department.

Enclosed are copies of the Policy Data pages and Endorsements 6408-03 & 6408-05 affected by this change. We have bracketed the GMIR percentage on the Policy Data Pages, and the accompanying Statement of Variability describes the conditions, and percentage range, under which the GMIR will be credited.

We would appreciate receiving your Department's acknowledgement of this informational filing at your earliest convenience. If you have any questions or need any additional information, please contact me at the phone number or email address noted above.

Sincerely,

Suzanne Wolf

Symme Wolf

Assistant Vice President – Product Development

SW: nq